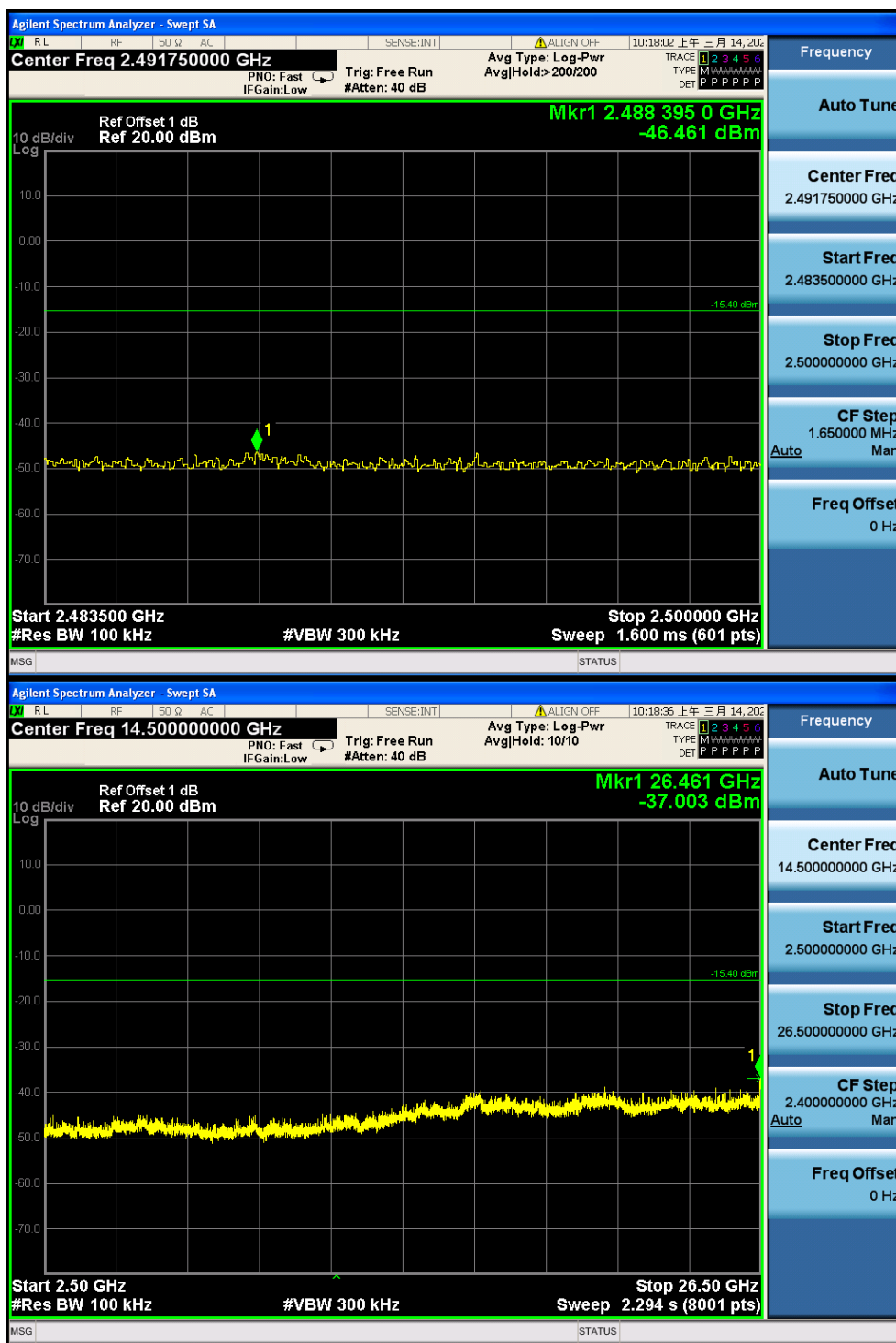
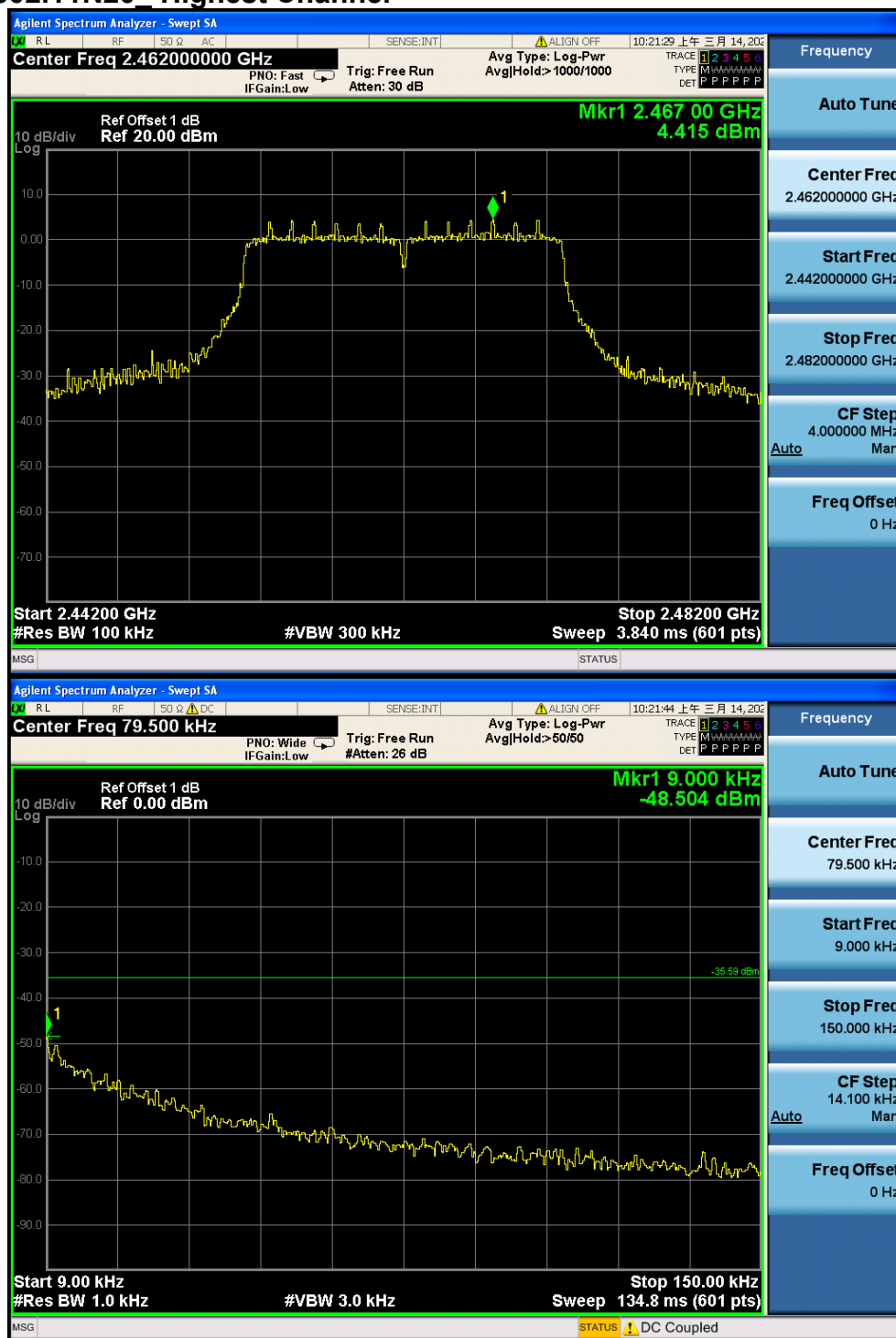






4.8.1.1.9 802.11N20 Highest Channel

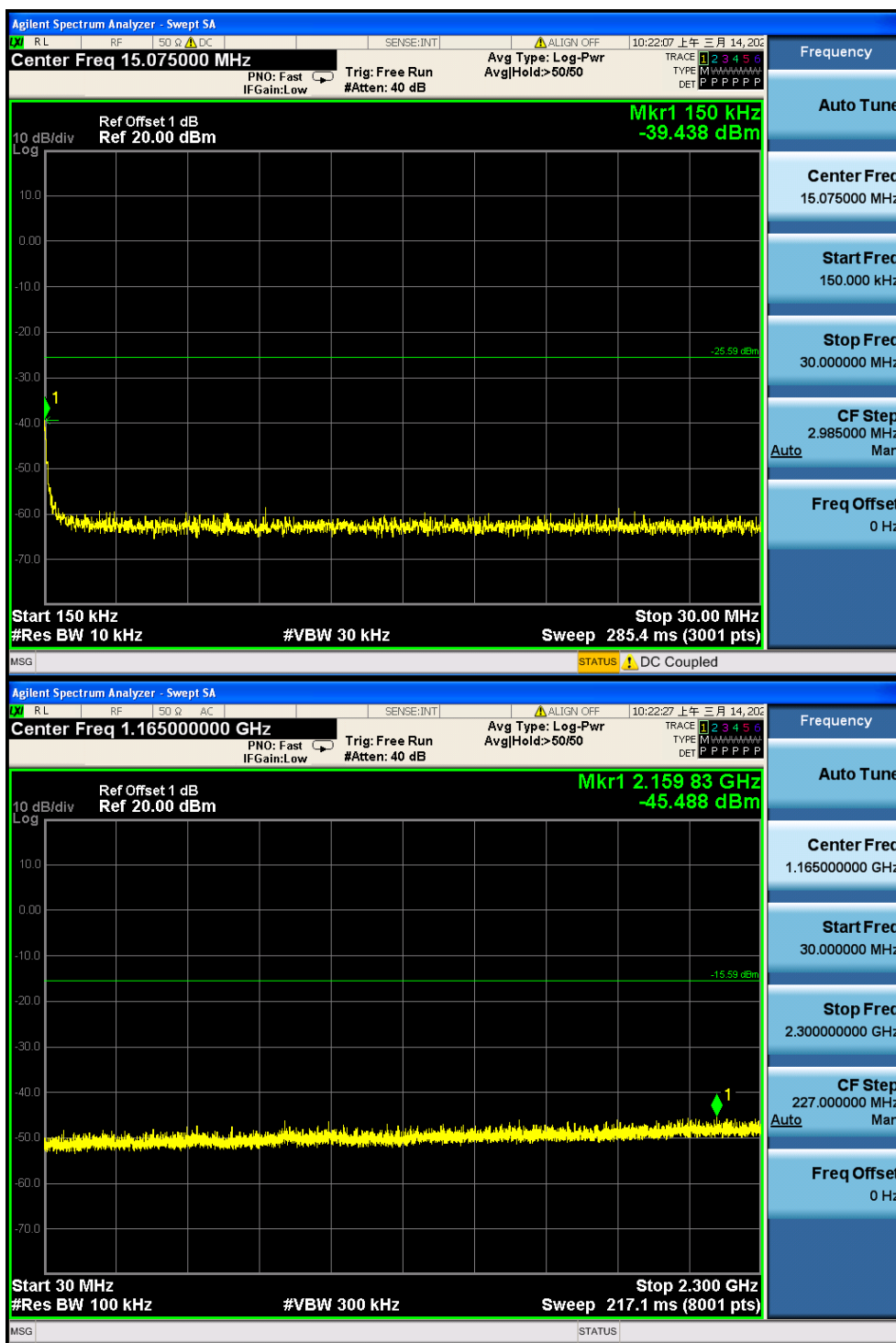


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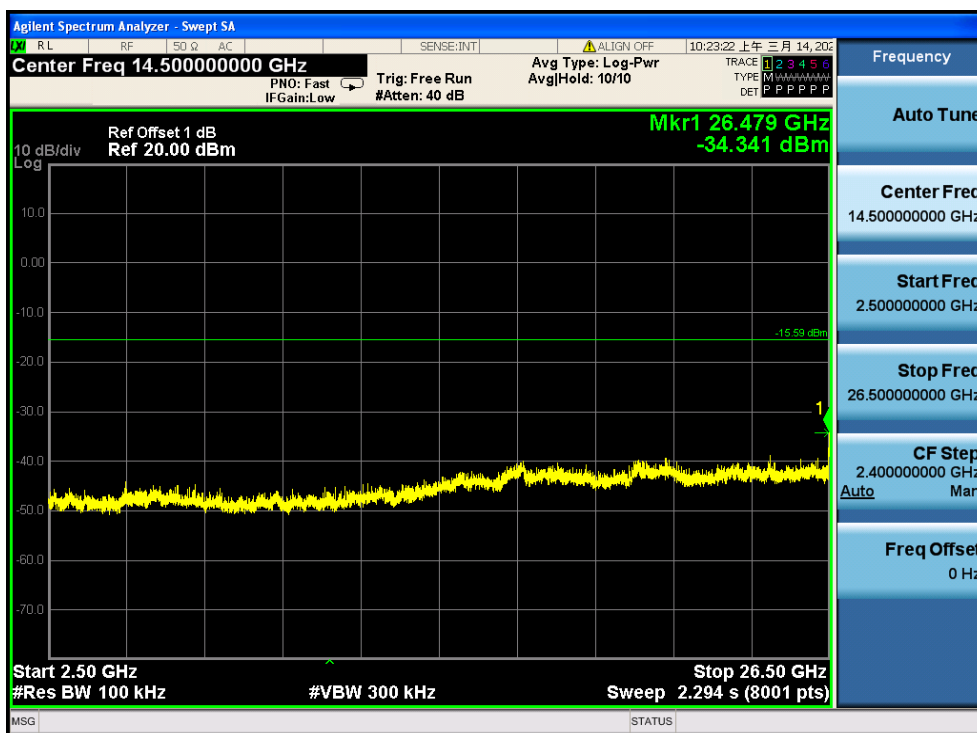
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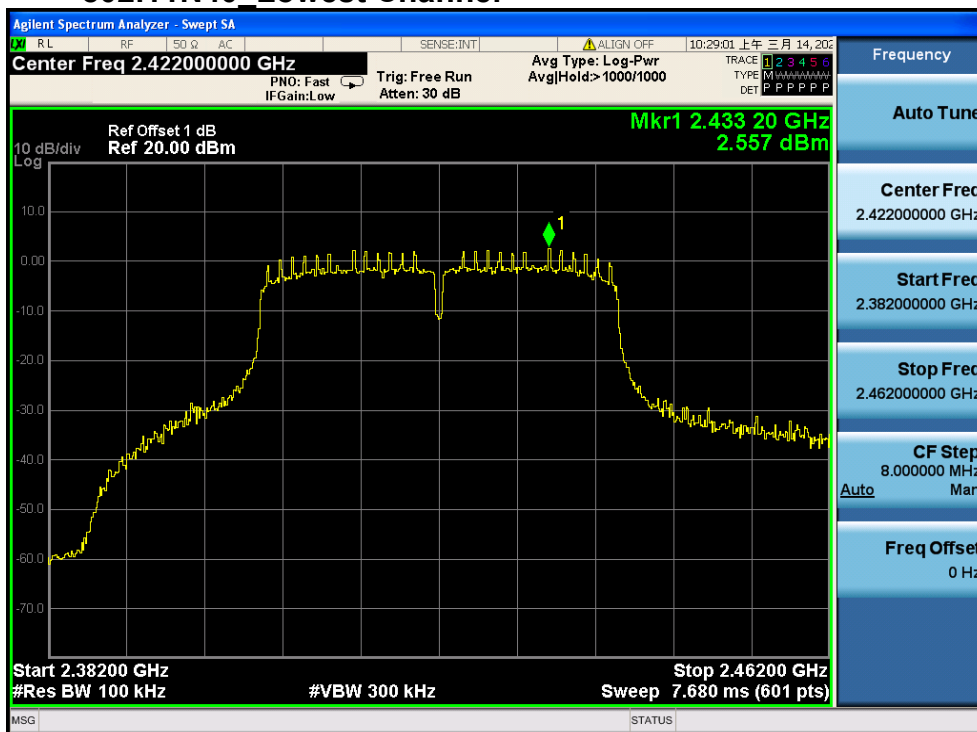
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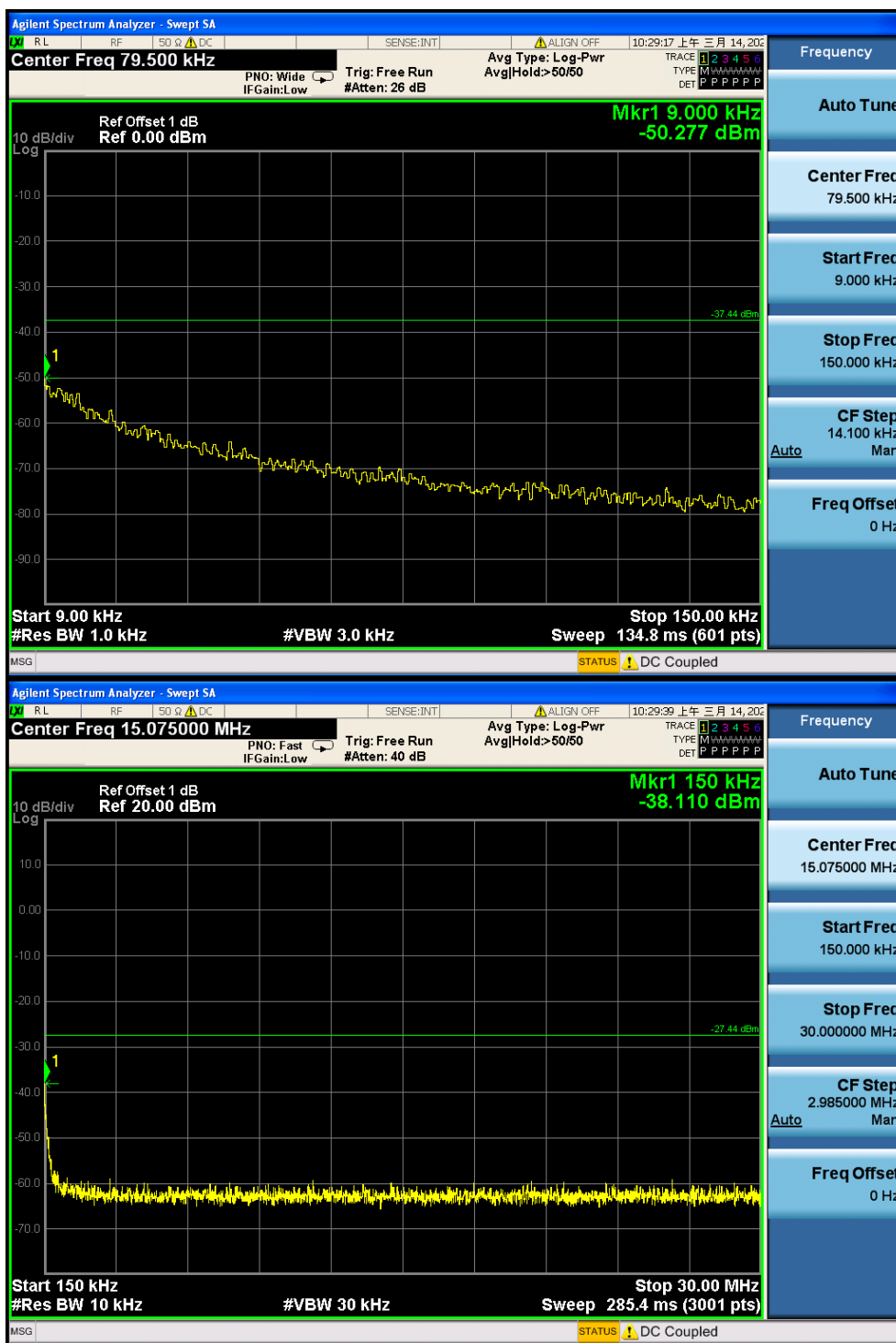


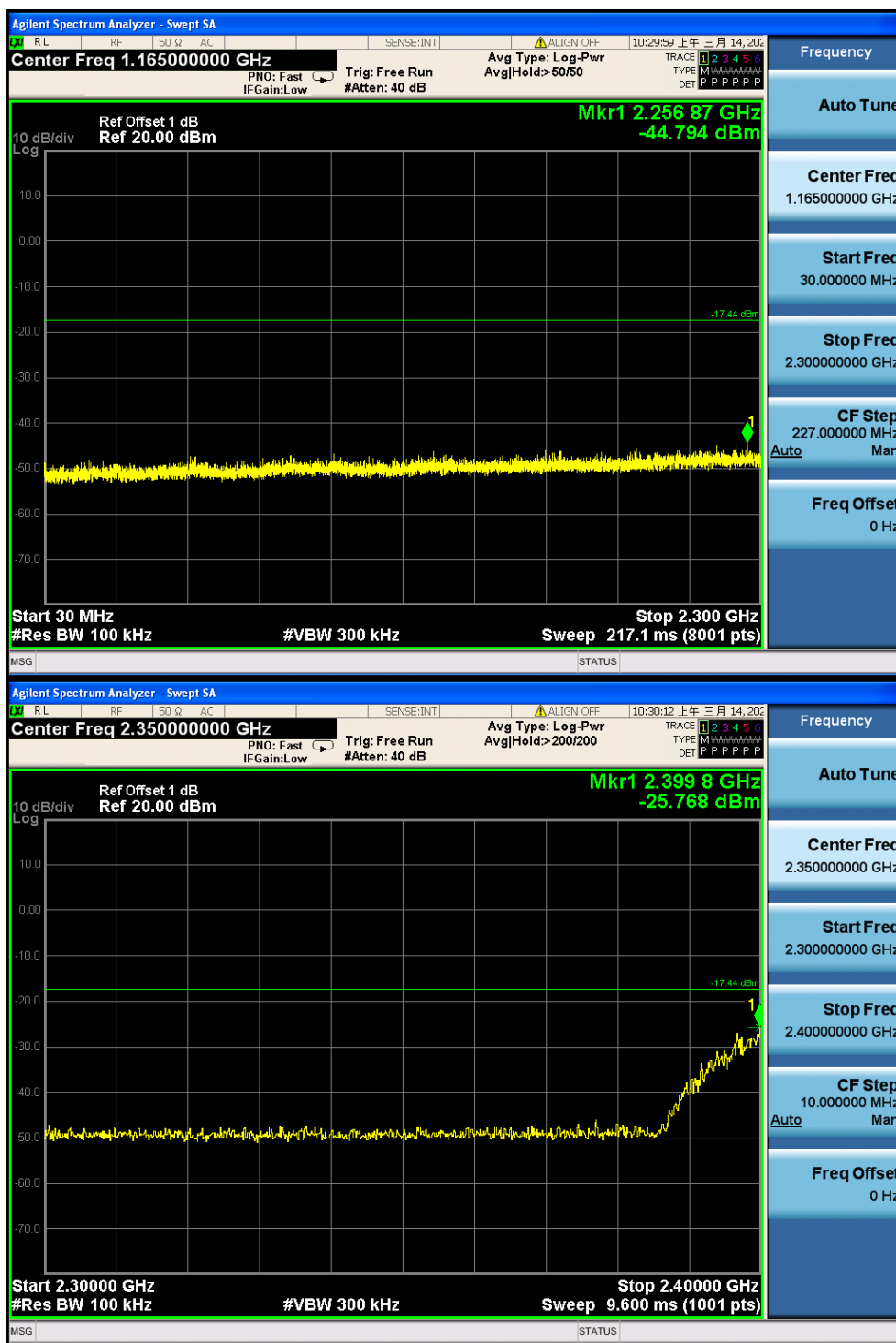
4.8.1.1.10 802.11N40 Lowest Channel

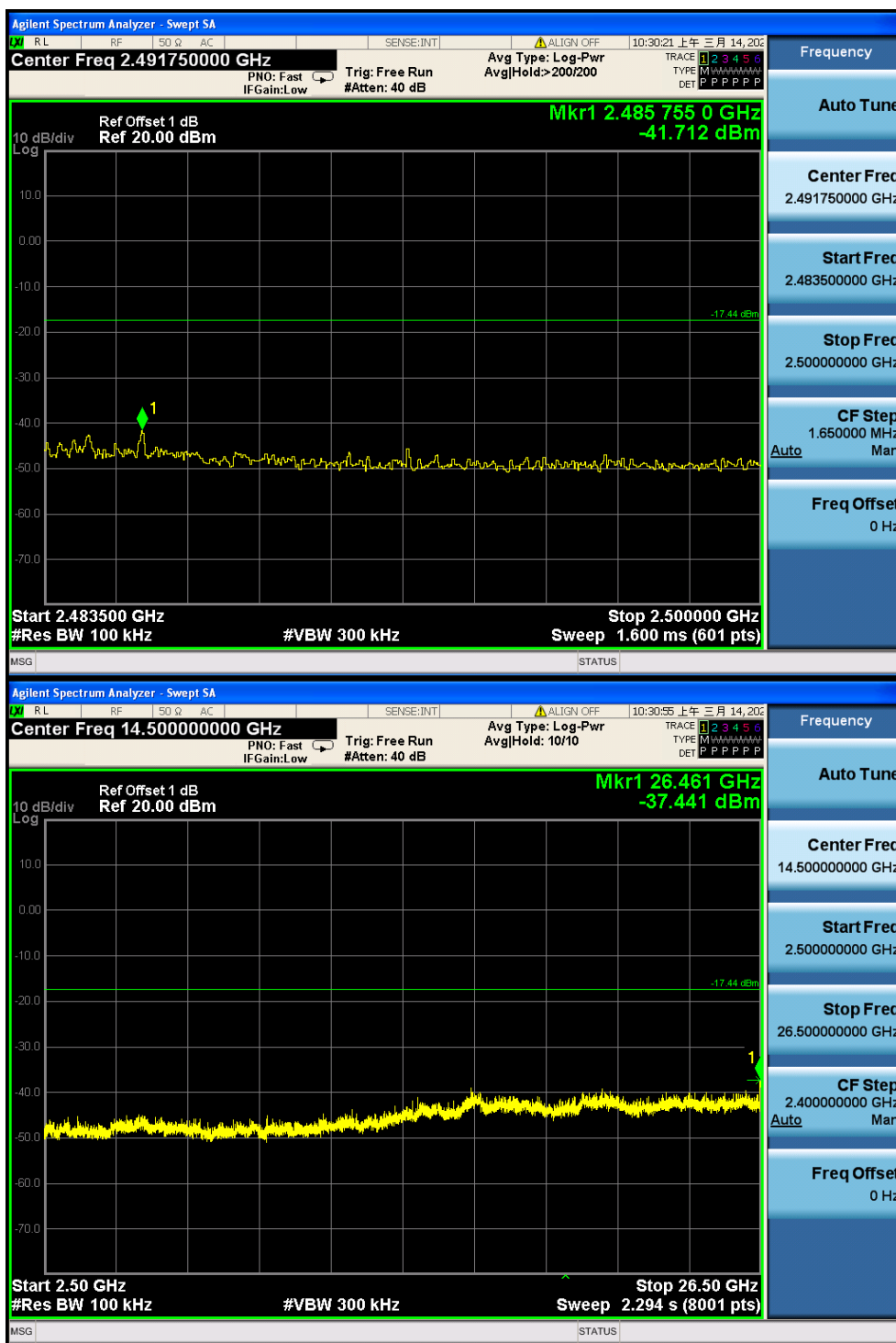


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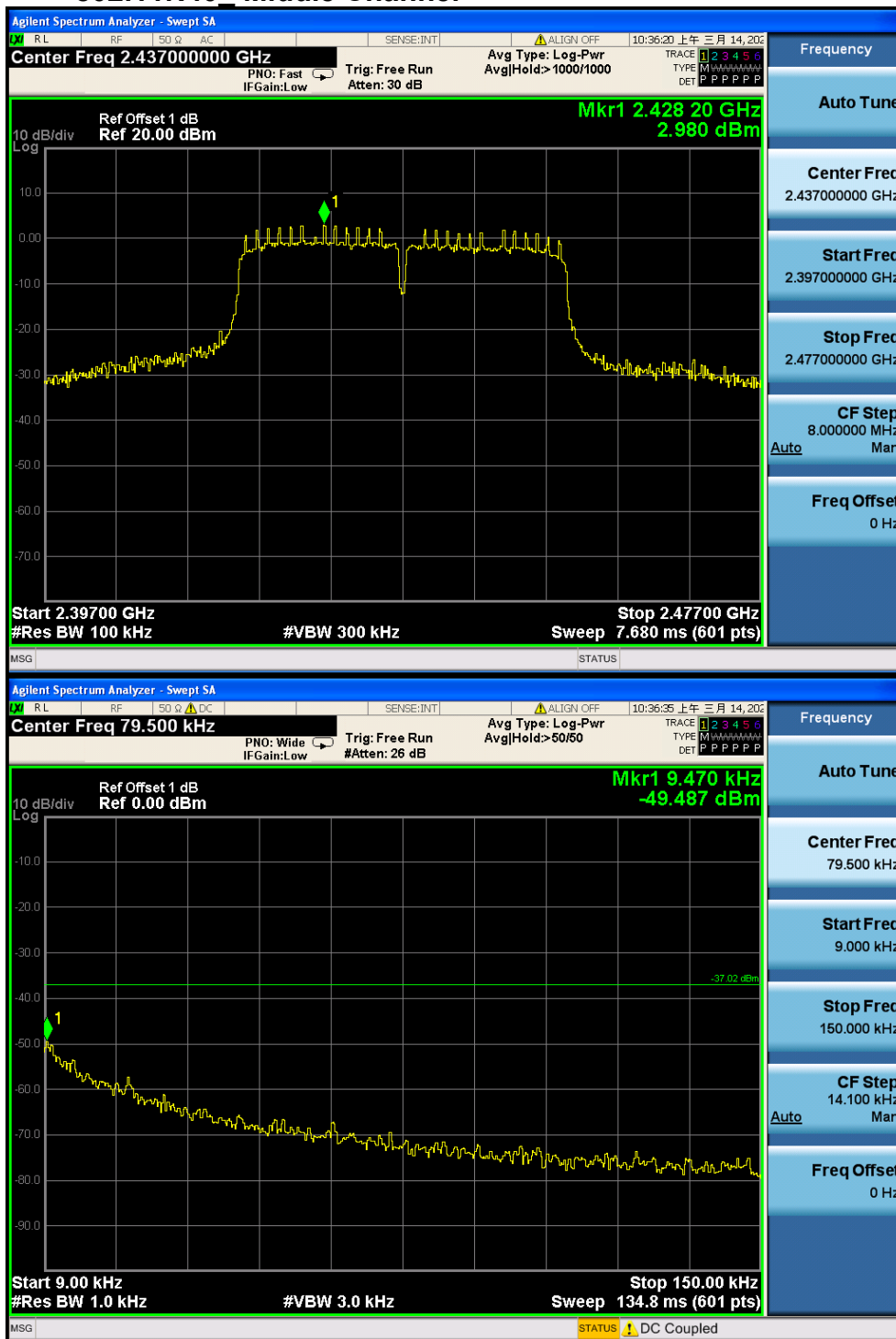
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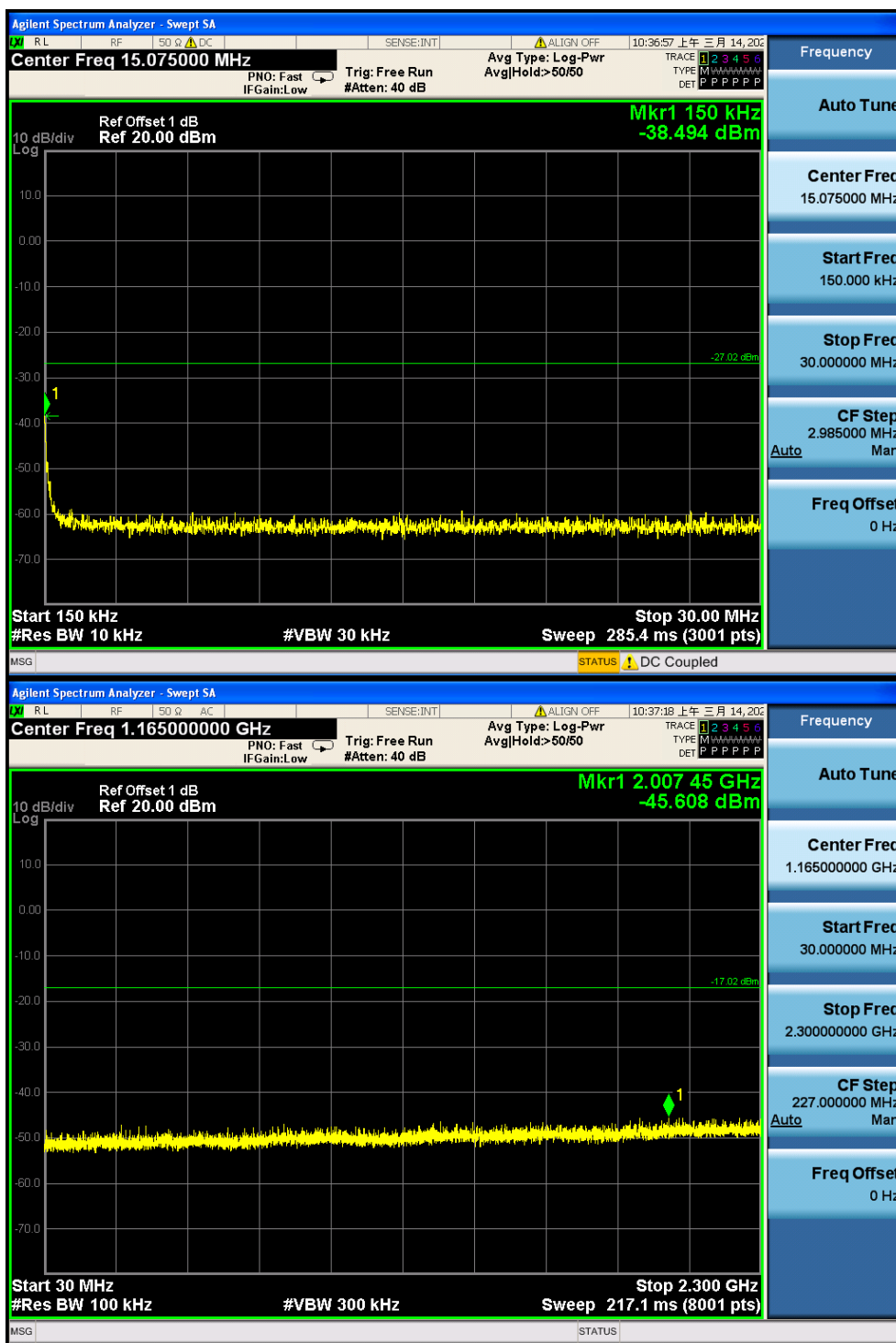




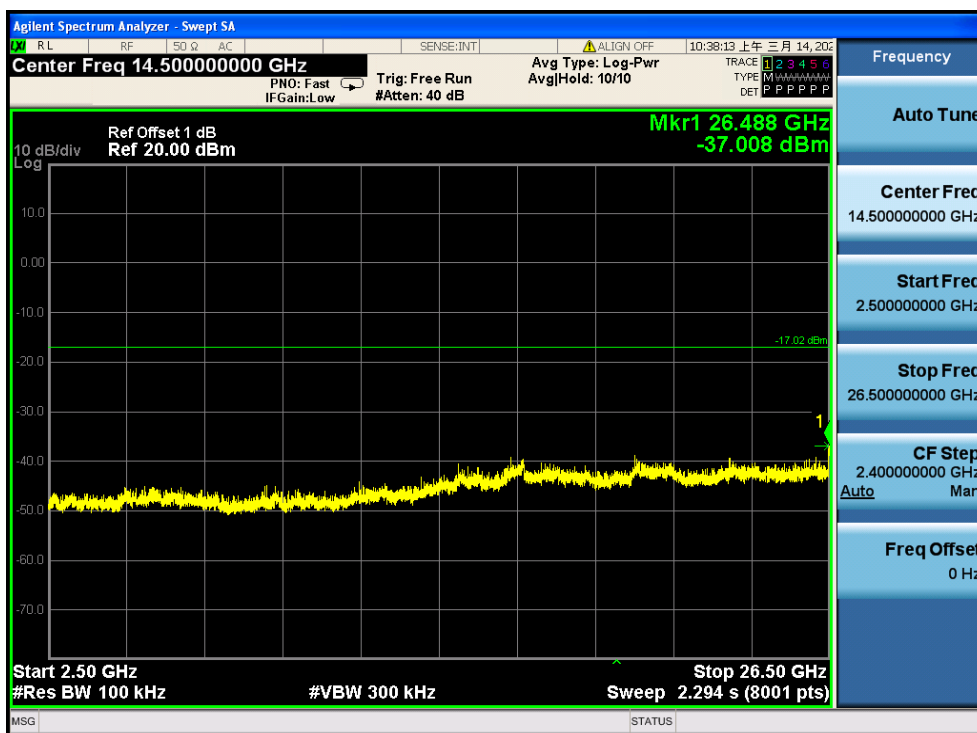


4.8.1.1.11 802.11N40 Middle Channel

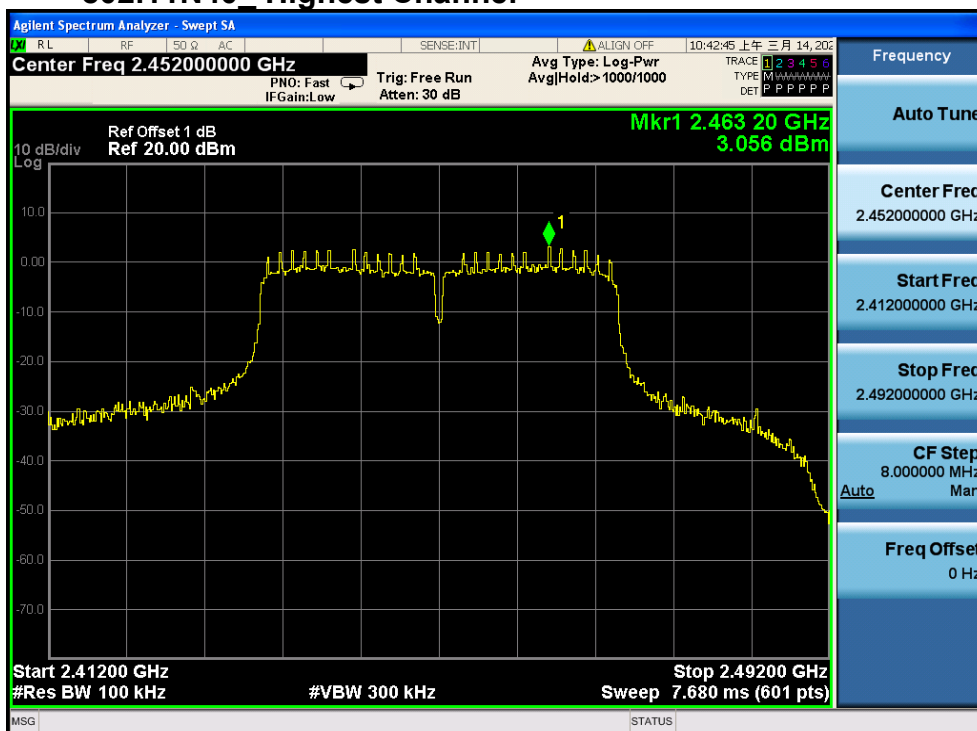


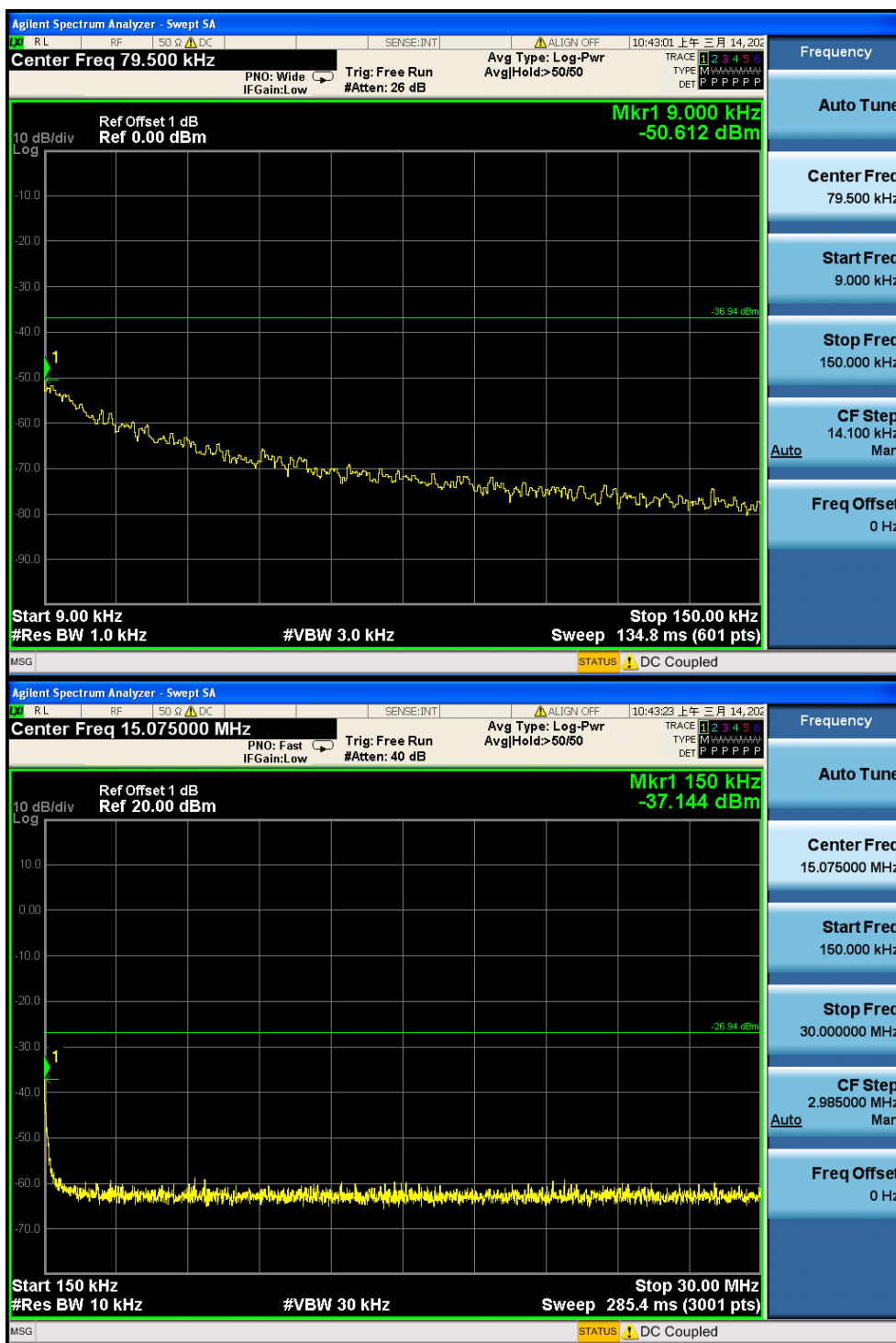




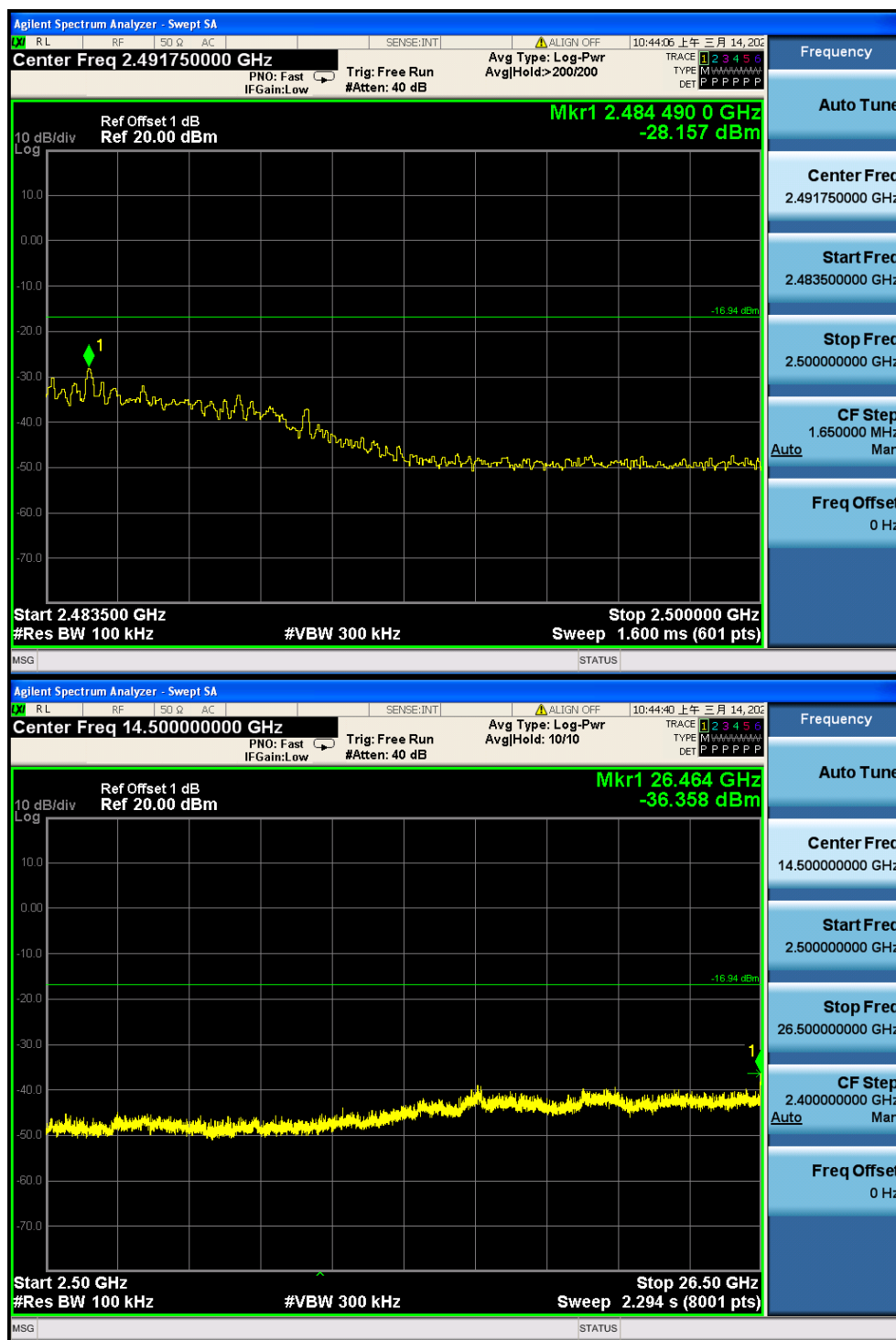


4.8.1.1.12 802.11N40_Highest Channel









Remark:

Scan from 9kHz to 25GHz, the disturbance between 9KHz to 30MHz was very low, and the above harmonics were the highest point could be found when testing, The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.



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4.9 Radiated Spurious Emissions

Test Requirement:	47 CFR Part 15C Section 15.209 and 15.205				
Test Method:	ANSI C63.10 :2013 Section 11.12				
Test Site:	Measurement Distance: 3m or 10m (Semi-Anechoic Chamber)				
Receiver Setup:	Frequency	Detector	RBW	VBW	Remark
	0.009MHz-0.090MHz	Peak	10kHz	30kHz	Peak
	0.009MHz-0.090MHz	Average	10kHz	30kHz	Average
	0.090MHz-0.110MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
	0.110MHz-0.490MHz	Peak	10kHz	30kHz	Peak
	0.110MHz-0.490MHz	Average	10kHz	30kHz	Average
	0.490MHz -30MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
	30MHz-1GHz	Quasi-peak	100 kHz	300kHz	Quasi-peak
	Above 1GHz	Peak	1MHz	3MHz	Peak
		Peak	1MHz	10Hz	Average
Limit:	Frequency	Field strength (microvolt/meter)	Limit (dBuV/m)	Remark	Measurement distance (m)
	0.009MHz-0.490MHz	2400/F(kHz)	-	-	300
	0.490MHz-1.705MHz	24000/F(kHz)	-	-	30
	1.705MHz-30MHz	30	-	-	30
	30MHz-88MHz	100	40.0	Quasi-peak	3
	88MHz-216MHz	150	43.5	Quasi-peak	3
	216MHz-960MHz	200	46.0	Quasi-peak	3
	960MHz-1GHz	500	54.0	Quasi-peak	3
	Above 1GHz	500	54.0	Average	3
	Remark: 15.35(b), Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.				

Test Setup:	
-------------	--



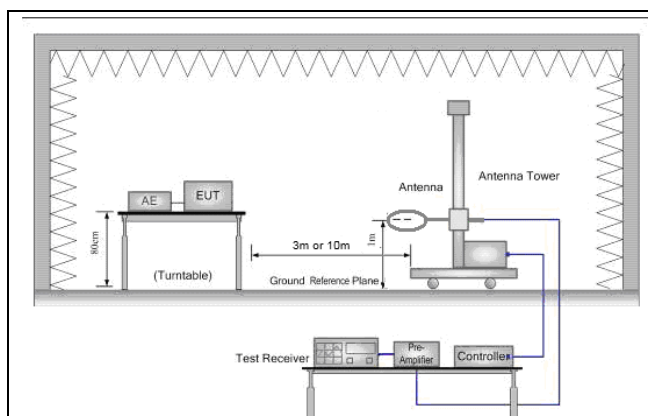


Figure 1. Below 30MHz

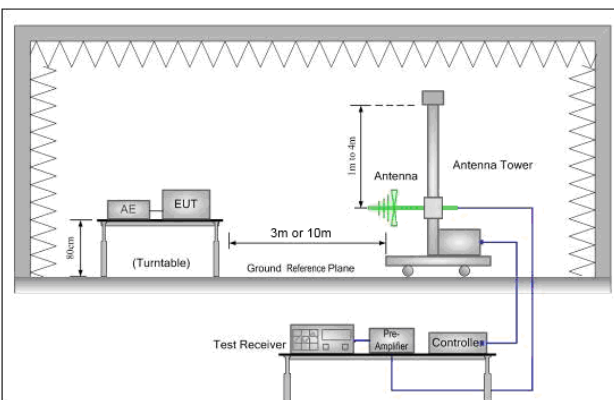


Figure 2. 30MHz to 1GHz

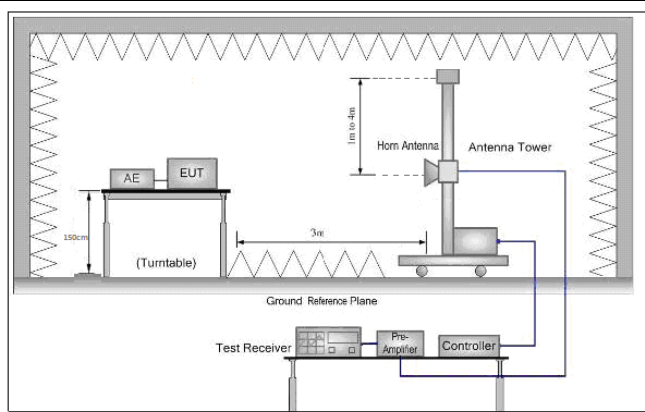


Figure 3. Above 1 GHz

Test Procedure:

- For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotating table was turned from 0 degrees to 360 degrees to find the maximum reading.
- Use the following spectrum analyzer settings:
 - Span shall be wide enough to fully capture the emission being measured;
 - Set RBW=100 kHz for $f < 1$ GHz, RBW=1MHz for $f > 1$ GHz ; VBW $\geq$ RBW; Sweep = auto;



	Detector function = peak; Trace = max hold for peak (3) For average measurement: use duty cycle correction factor method per 15.35(c). Duty cycle = On time/100 milliseconds On time = $N_1 * L_1 + N_2 * L_2 + \dots + N_{n-1} * L_{n-1} + N_n * L_n$ Where N_1 is number of type 1 pulses, L_1 is length of type 1 pulses, etc. Average Emission Level = Peak Emission Level + 20*log(Duty cycle) g. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. h. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. i. Test the EUT in the lowest channel, the middle channel, the Highest channel j. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, And found the X axis positioning which it is worse case. k. Repeat above procedures until all frequencies measured was complete.
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates. Charge + Transmitting mode.
Final Test Mode:	Pretest the EUT at Charge + Transmitting mode. Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11B; 6Mbps of rate is the worst case of 802.11G; 6.5Mbps of rate is the worst case of 802.11N(HT20); 13.5Mbps of rate is the worst case of 802.11N(HT40) For below 1GHz, through Pre-scan, find the 1Mbps of rate of 802.11B at lowest channel is the worst case. Only the worst case is recorded in the report.
Instruments Used:	Refer to section 5.10 for details
Test Results:	Pass



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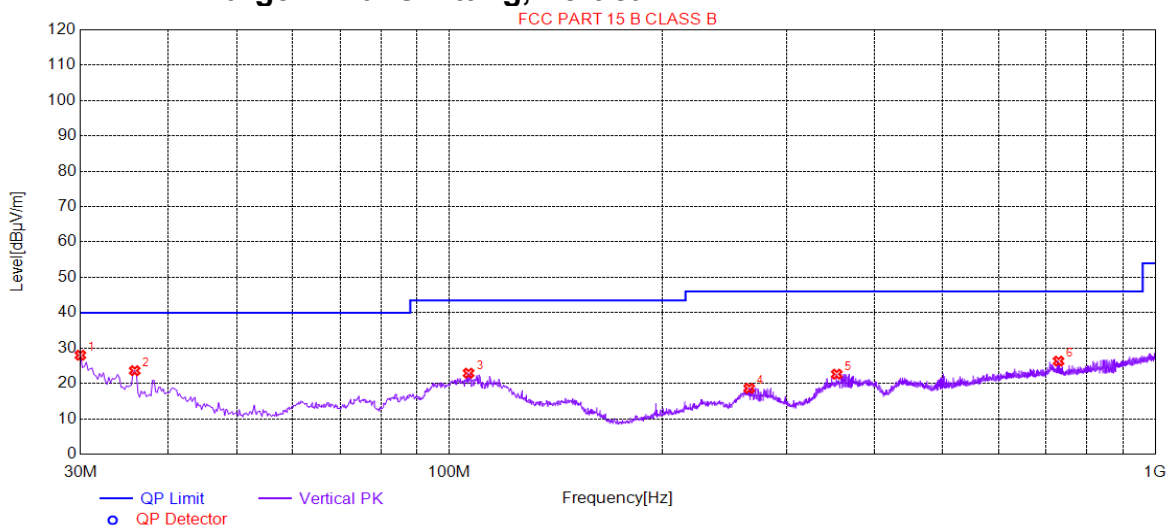
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4.9.1 Radiated emission below 1GHz

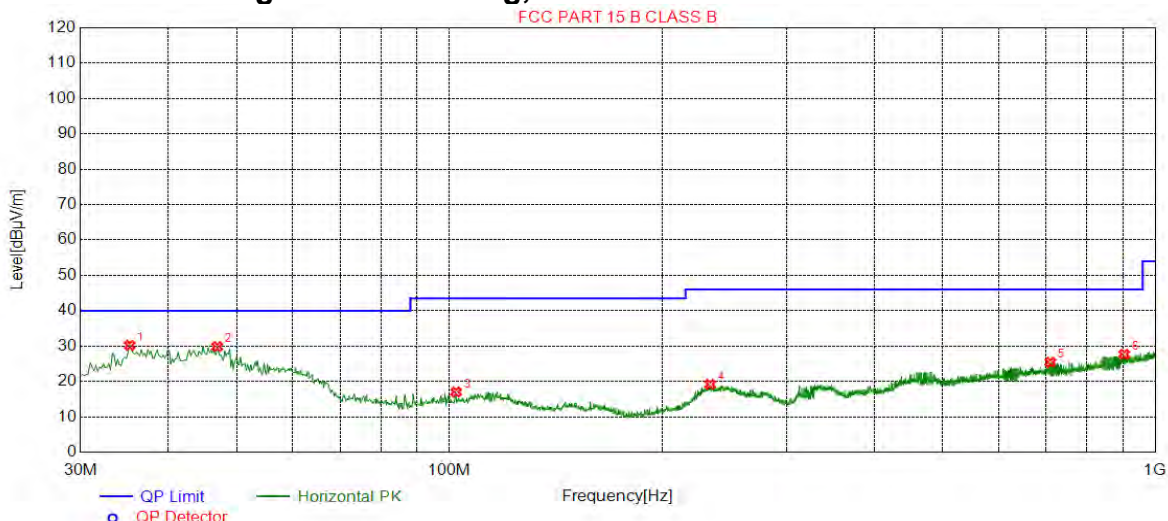
4.9.1.1 Charge + Transmitting, Vertical



Suspected List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	30.0000	27.98	-30.08	40.00	12.02	165	332	Vertical
2	35.8212	23.61	-29.69	40.00	16.39	260	332	Vertical
3	106.4513	22.91	-32.00	43.50	20.59	234	192	Vertical
4	265.9512	18.62	-29.25	46.00	27.38	190	241	Vertical
5	353.8508	22.63	-26.76	46.00	23.37	189	80	Vertical
6	729.5099	26.31	-18.81	46.00	19.69	226	317	Vertical



4.9.1.2 Charge + Transmitting, Horizontal



Suspected List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	35.2390	30.20	-29.88	40.00	9.80	166	244	Horizontal
2	46.8814	29.84	-30.40	40.00	10.16	198	21	Horizontal
3	102.1824	17.02	-32.00	43.50	26.48	241	235	Horizontal
4	234.1288	19.17	-30.27	46.00	26.83	168	268	Horizontal
5	710.4941	25.41	-19.26	46.00	20.59	139	333	Horizontal
6	903.7568	27.69	-15.99	46.00	18.31	114	14	Horizontal



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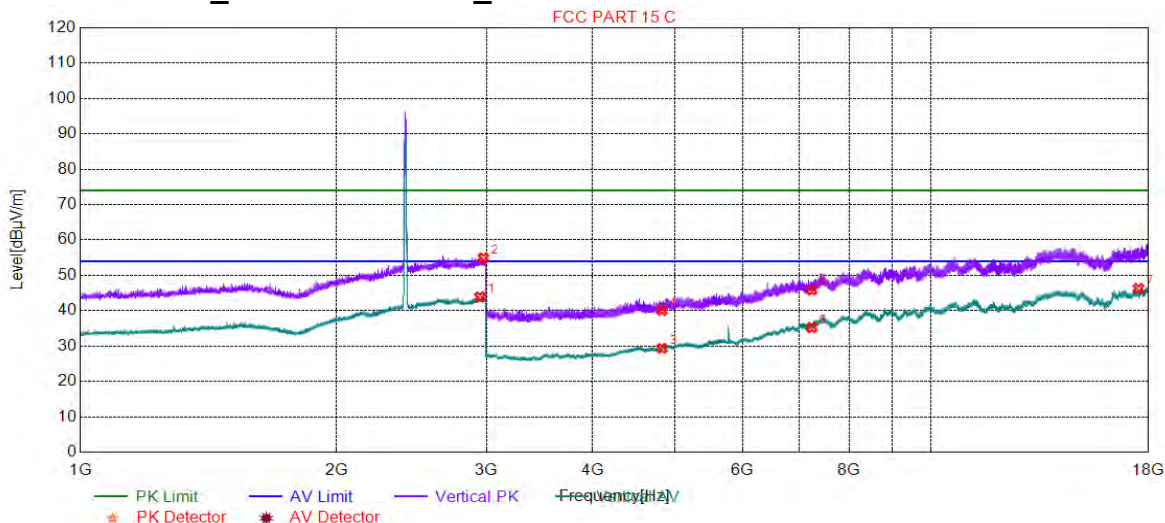
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4.9.2 Transmitter emission above 1GHz

4.9.2.1 ANT1

4.9.2.1.1 802.11B_Lowest Channel_ Vertical

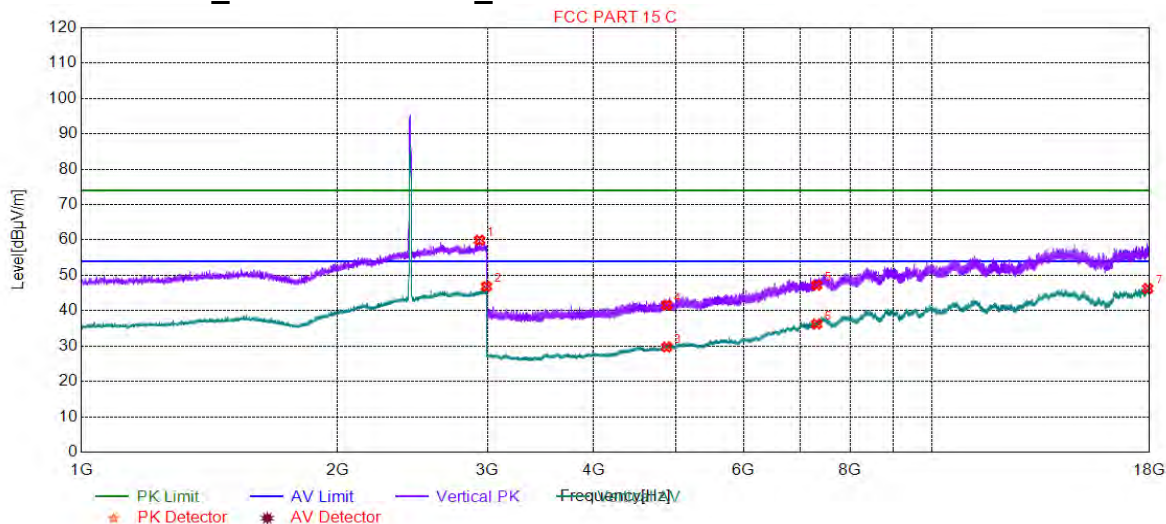


Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2948.4871	43.89	9.66	54.00	10.11	275	10	Vertical
2	2975.4939	54.92	9.56	74.00	19.08	185	107	Vertical
3	4824.0000	29.35	-18.21	54.00	24.65	236	349	Vertical
4	4824.0000	40.06	-18.21	74.00	33.94	246	18	Vertical
5	7236.0000	45.81	-9.99	74.00	28.19	229	0	Vertical
6	7236.0000	35.22	-9.99	54.00	18.78	252	41	Vertical
7	17514.875	46.30	0.98	54.00	7.70	182	342	Vertical



4.9.2.1.2 802.11B_ Middle Channel_ Vertical



Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2936.9842	59.93	9.54	74.00	14.07	229	38	Vertical
2	2992.4981	46.82	9.48	54.00	7.18	248	287	Vertical
3	4874.0000	29.73	-17.99	54.00	24.27	202	350	Vertical
4	4874.0000	41.58	-17.99	74.00	32.42	232	45	Vertical
5	7311.0000	47.22	-9.74	74.00	26.78	181	342	Vertical
6	7311.0000	36.24	-9.74	54.00	17.76	159	342	Vertical
7	17907.595	46.27	0.69	54.00	7.73	263	141	Vertical



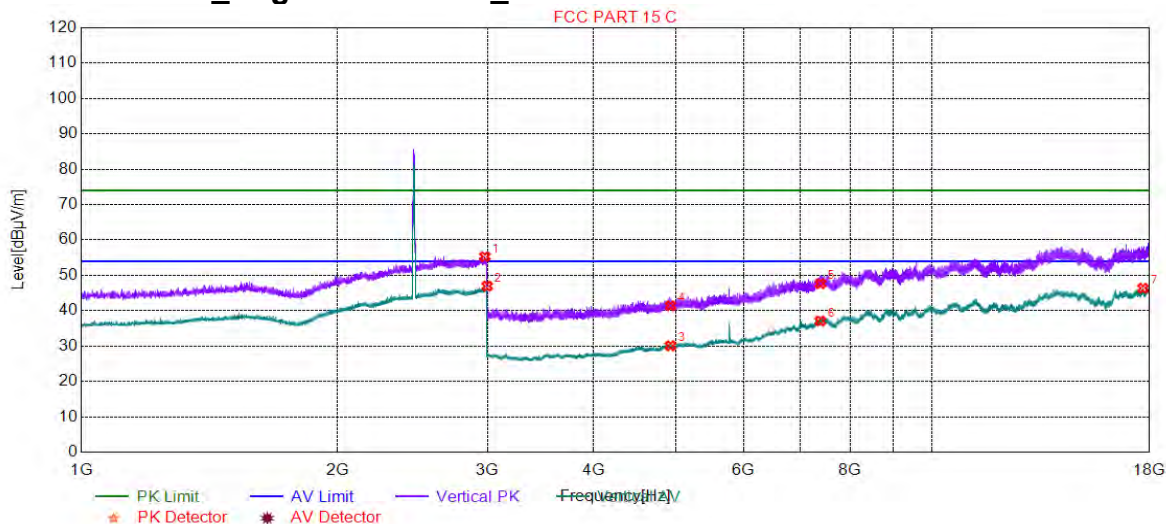
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4.9.2.1.3 802.11B_ Highest Channel_ Vertical

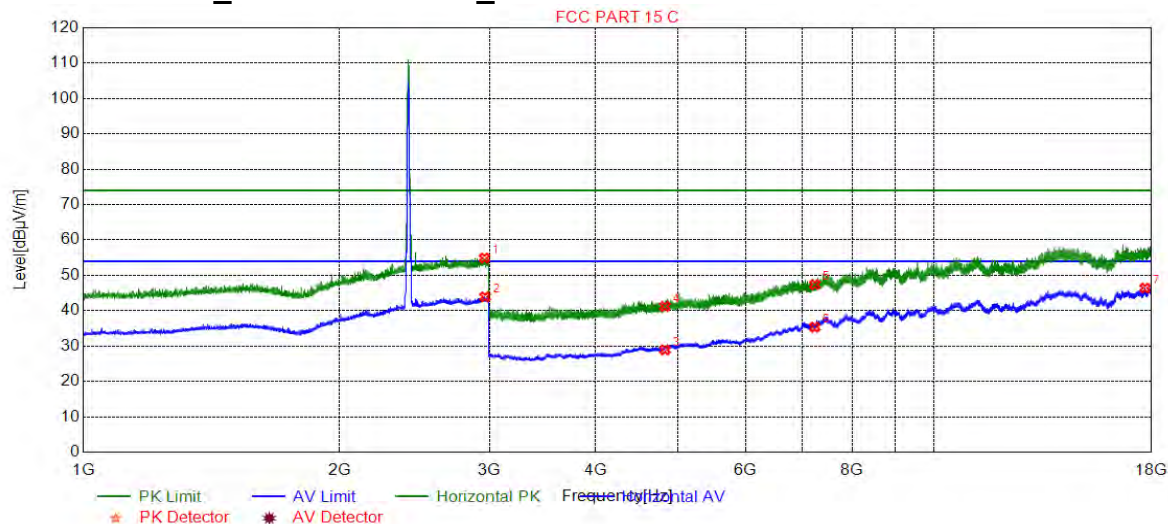


Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2980.4951	55.32	9.54	74.00	18.68	275	328	Vertical
2	2997.9995	46.95	9.46	54.00	7.05	288	108	Vertical
3	4924.0000	30.09	-17.72	54.00	23.91	261	266	Vertical
4	4924.0000	41.38	-17.72	74.00	32.62	207	322	Vertical
5	7386.0000	47.65	-9.55	74.00	26.35	201	240	Vertical
6	7386.0000	37.09	-9.55	54.00	16.91	297	188	Vertical
7	17678.783	46.35	1.35	54.00	7.65	255	292	Vertical

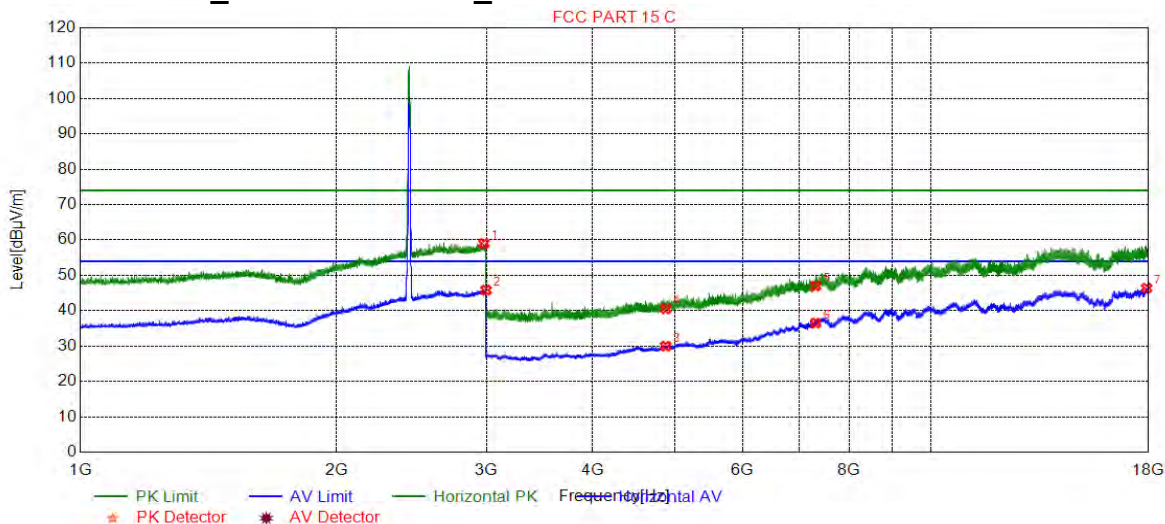


4.9.2.1.4 802.11B_Lowest Channel_ Horizontal



Suspected List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2960.4901	54.90	9.63	74.00	19.10	107	224	Horizontal
2	2964.9912	43.91	9.61	54.00	10.09	205	320	Horizontal
3	4824.0000	28.94	-18.21	54.00	25.06	131	264	Horizontal
4	4824.0000	41.23	-18.21	74.00	32.77	189	182	Horizontal
5	7236.0000	47.39	-9.99	74.00	26.61	204	191	Horizontal
6	7236.0000	35.34	-9.99	54.00	18.66	110	292	Horizontal
7	17685.934	46.40	1.35	54.00	7.60	208	292	Horizontal

4.9.2.1.5 802.11B_ Middle Channel_ Horizontal



Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2980.4951	59.00	9.54	74.00	15.00	154	280	Horizontal
2	2996.9993	45.82	9.46	54.00	8.18	103	87	Horizontal
3	4874.0000	29.96	-17.99	54.00	24.04	186	156	Horizontal
4	4874.0000	40.54	-17.99	74.00	33.46	171	46	Horizontal
5	7311.0000	46.98	-9.74	74.00	27.02	131	0	Horizontal
6	7311.0000	36.53	-9.74	54.00	17.47	118	89	Horizontal
7	17903.745	46.39	0.69	54.00	7.61	176	241	Horizontal



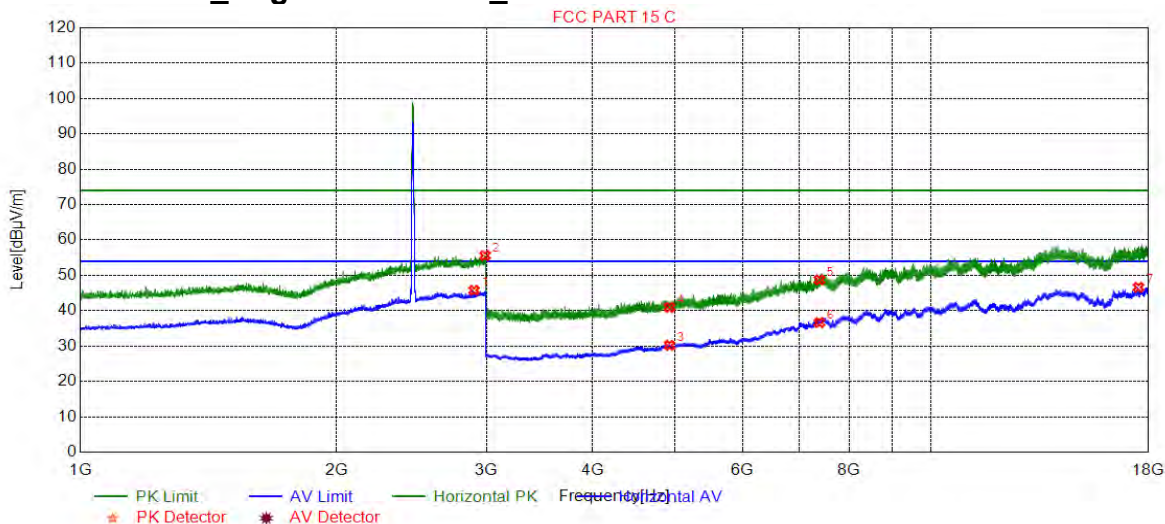
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4.9.2.1.6 802.11B_ Highest Channel_ Horizontal

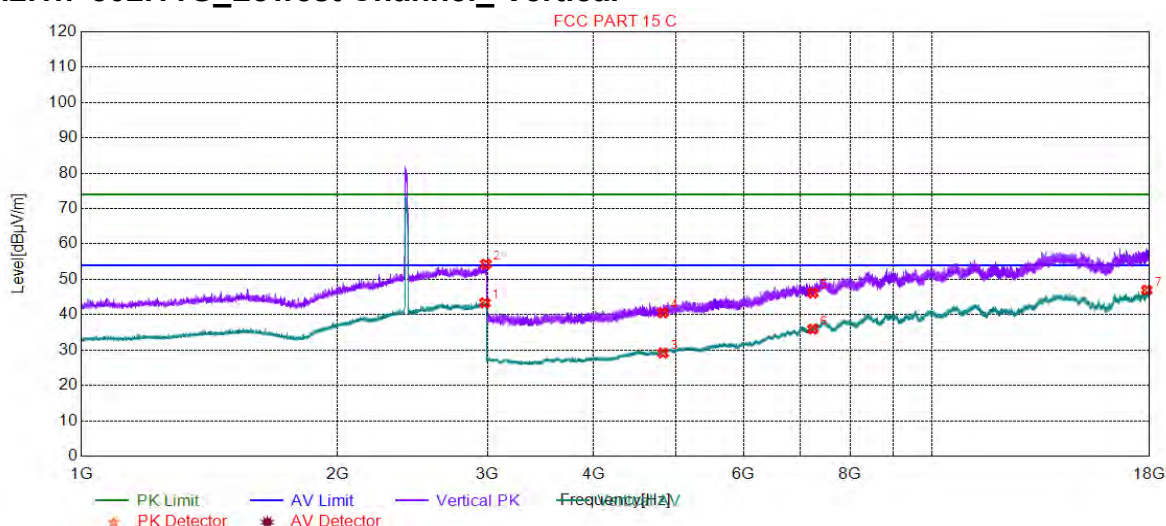


Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2900.9752	45.76	9.15	54.00	8.24	125	252	Horizontal
2	2988.9972	55.58	9.50	74.00	18.42	120	142	Horizontal
3	4924.0000	30.20	-17.72	54.00	23.80	129	183	Horizontal
4	4924.0000	40.93	-17.72	74.00	33.07	226	294	Horizontal
5	7386.0000	48.73	-9.55	74.00	25.27	140	242	Horizontal
6	7386.0000	36.65	-9.55	54.00	17.35	239	40	Horizontal
7	17511.575	46.61	0.97	54.00	7.39	206	0	Horizontal



4.9.2.1.7 802.11G_Lowest Channel_Vertical

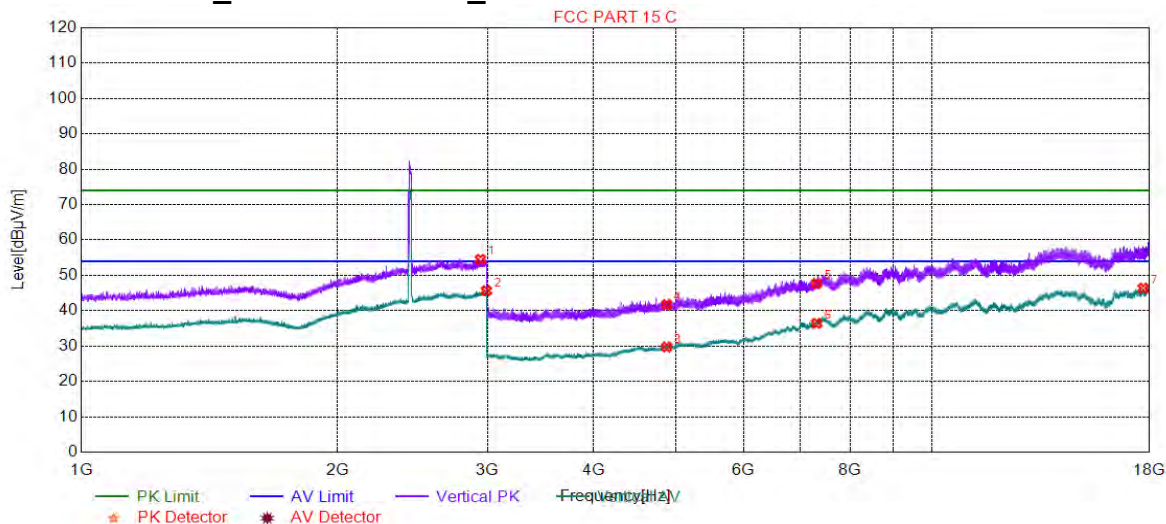


Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2979.9950	43.35	9.54	54.00	10.65	169	259	Vertical
2	2987.4969	54.32	9.51	74.00	19.68	219	204	Vertical
3	4824.0000	29.16	-18.21	54.00	24.84	285	265	Vertical
4	4824.0000	40.54	-18.21	74.00	33.46	296	346	Vertical
5	7236.0000	46.15	-9.99	74.00	27.85	216	89	Vertical
6	7236.0000	35.95	-9.99	54.00	18.05	260	40	Vertical
7	17863.043	46.94	0.20	54.00	7.06	194	191	Vertical



4.9.2.1.8 802.11G_Middle Channel_Vertical



Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2943.9860	54.52	9.62	74.00	19.48	159	82	Vertical
2	2991.4979	45.66	9.49	54.00	8.34	194	273	Vertical
3	4874.0000	29.74	-17.99	54.00	24.26	291	182	Vertical
4	4874.0000	41.73	-17.99	74.00	32.27	272	155	Vertical
5	7311.0000	47.68	-9.74	74.00	26.32	194	140	Vertical
6	7311.0000	36.42	-9.74	54.00	17.58	286	291	Vertical
7	17693.634	46.36	1.36	54.00	7.64	280	241	Vertical



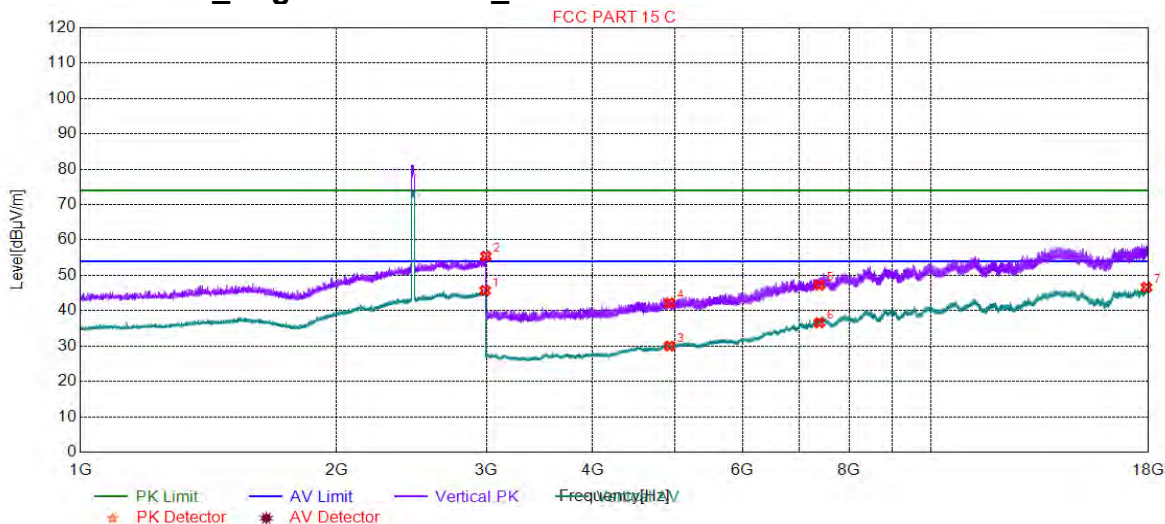
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4.9.2.1.9 802.11G_ Highest Channel_ Vertical



Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2989.4974	45.71	9.50	54.00	8.29	164	302	Vertical
2	2995.4989	55.41	9.47	74.00	18.59	281	232	Vertical
3	4924.0000	30.01	-17.72	54.00	23.99	244	267	Vertical
4	4924.0000	42.21	-17.72	74.00	31.79	255	101	Vertical
5	7386.0000	47.24	-9.55	74.00	26.76	237	87	Vertical
6	7386.0000	36.62	-9.55	54.00	17.38	276	0	Vertical
7	17897.144	46.62	0.65	54.00	7.38	193	137	Vertical



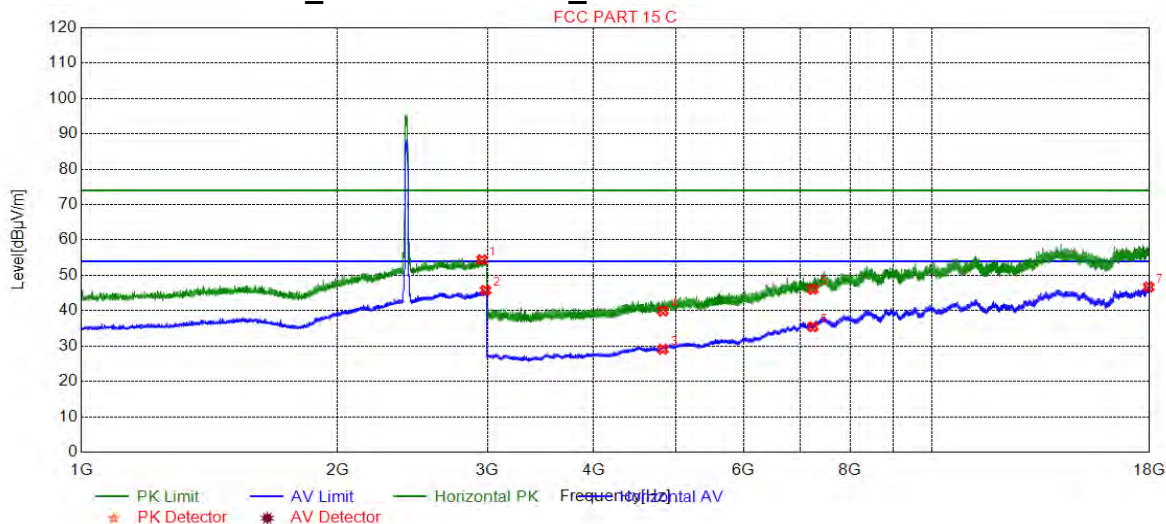
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4.9.2.1.10 802.11G_Lowest Channel_Horizontal

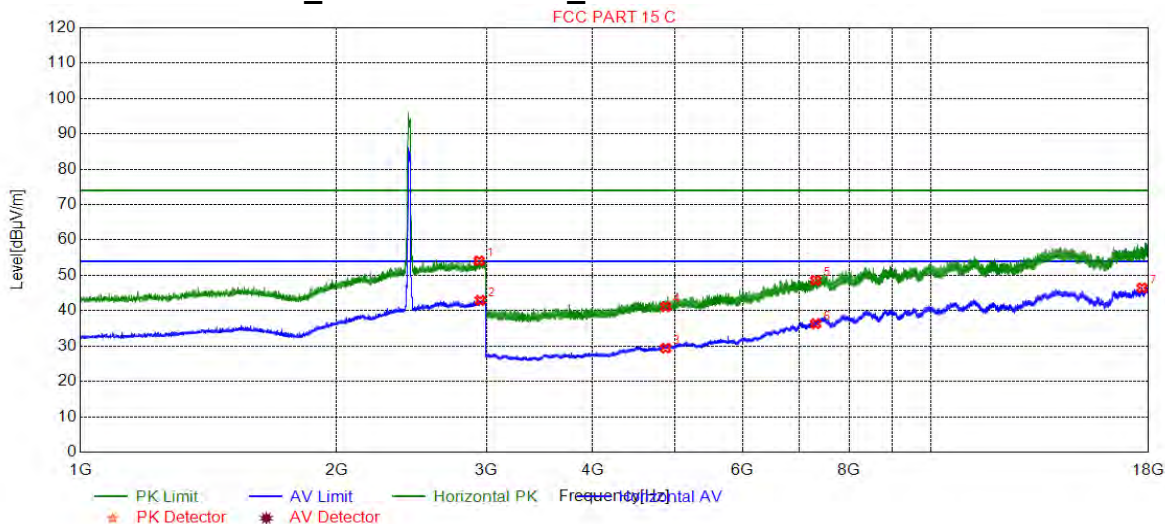


Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2955.9890	54.43	9.65	74.00	19.57	185	360	Horizontal
2	2984.9962	45.78	9.52	54.00	8.22	160	59	Horizontal
3	4824.0000	29.11	-18.21	54.00	24.89	150	266	Horizontal
4	4824.0000	39.92	-18.21	74.00	34.08	189	321	Horizontal
5	7236.0000	46.10	-9.99	74.00	27.90	186	191	Horizontal
6	7236.0000	35.48	-9.99	54.00	18.52	117	90	Horizontal
7	17948.847	46.70	0.70	54.00	7.30	173	291	Horizontal



4.9.2.1.11 802.11G_ Middle Channel_ Horizontal

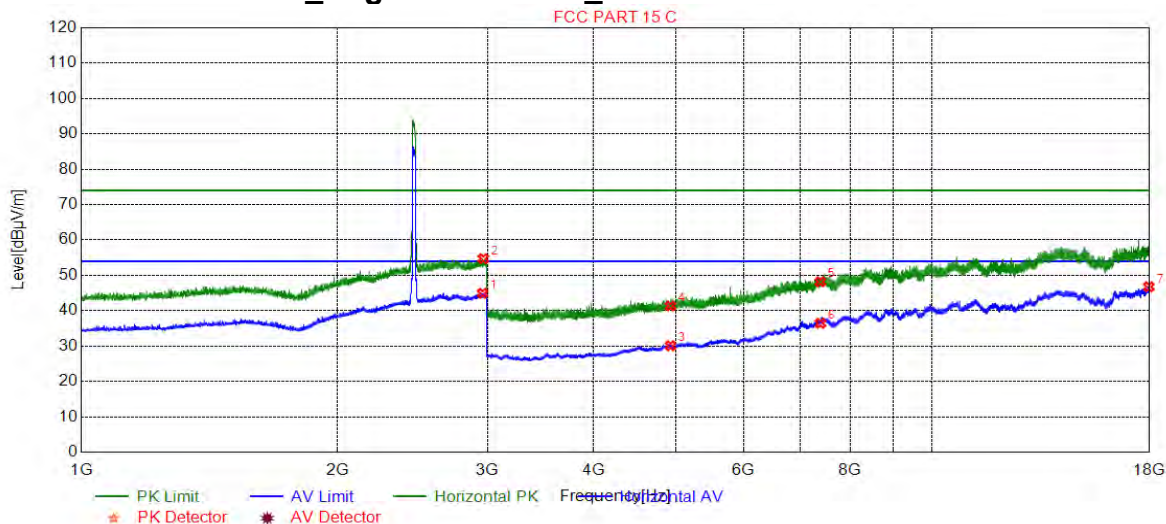


Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2941.4854	54.09	9.59	74.00	19.91	164	252	Horizontal
2	2950.4876	42.94	9.68	54.00	11.06	161	293	Horizontal
3	4874.0000	29.41	-17.99	54.00	24.59	183	18	Horizontal
4	4874.0000	41.16	-17.99	74.00	32.84	177	299	Horizontal
5	7311.0000	48.60	-9.74	74.00	25.40	200	191	Horizontal
6	7311.0000	36.32	-9.74	54.00	17.68	229	40	Horizontal
7	17684.834	46.46	1.35	54.00	7.54	106	141	Horizontal



4.9.2.1.12 802.11G_ Highest Channel_ Horizontal



Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2960.4901	44.92	9.63	54.00	9.08	121	305	Horizontal
2	2966.9917	54.72	9.60	74.00	19.28	181	45	Horizontal
3	4924.0000	30.10	-17.72	54.00	23.90	229	218	Horizontal
4	4924.0000	41.34	-17.72	74.00	32.66	222	218	Horizontal
5	7386.0000	48.19	-9.55	74.00	25.81	154	241	Horizontal
6	7386.0000	36.45	-9.55	54.00	17.55	137	0	Horizontal
7	17960.948	46.76	0.71	54.00	7.24	200	39	Horizontal



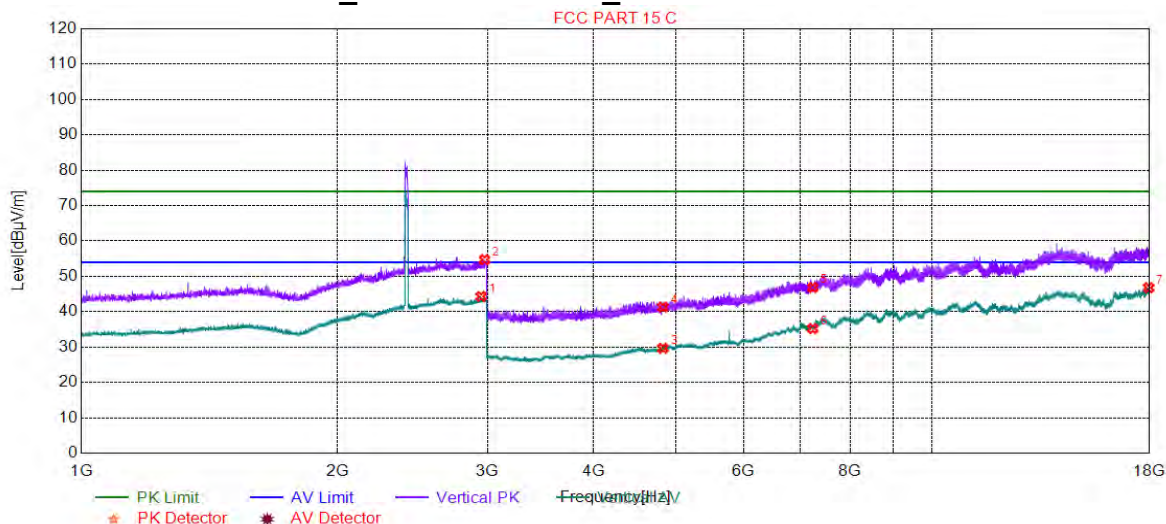
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4.9.2.1.13 802.11N20_Lowest Channel_Vertical

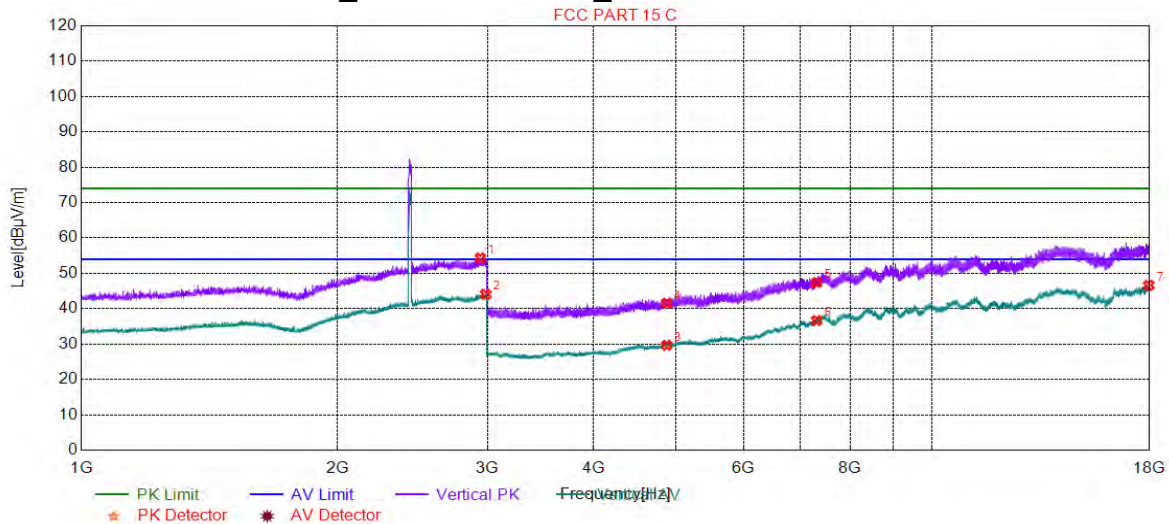


Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2949.4874	44.32	9.67	54.00	9.68	9.68	246	Vertical
2	2977.4944	54.73	9.55	74.00	19.27	19.27	26	Vertical
3	4824.0000	29.67	-18.21	54.00	24.33	24.33	320	Vertical
4	4824.0000	41.29	-18.21	74.00	32.71	32.71	156	Vertical
5	7236.0000	46.82	-9.99	74.00	27.18	27.18	140	Vertical
6	7236.0000	35.24	-9.99	54.00	18.76	18.76	90	Vertical
7	17952.697	46.77	0.71	54.00	7.23	7.23	292	Vertical



4.9.2.1.14 802.11N20_Middle Channel_Vertical



Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2942.9857	54.37	9.60	74.00	19.63	292	260	Vertical
2	2986.9967	44.09	9.51	54.00	9.91	248	260	Vertical
3	4874.0000	29.67	-17.99	54.00	24.33	182	46	Vertical
4	4874.0000	41.59	-17.99	74.00	32.41	156	100	Vertical
5	7311.0000	47.39	-9.74	74.00	26.61	204	342	Vertical
6	7311.0000	36.68	-9.74	54.00	17.32	255	90	Vertical
7	17955.997	46.61	0.71	54.00	7.39	247	40	Vertical



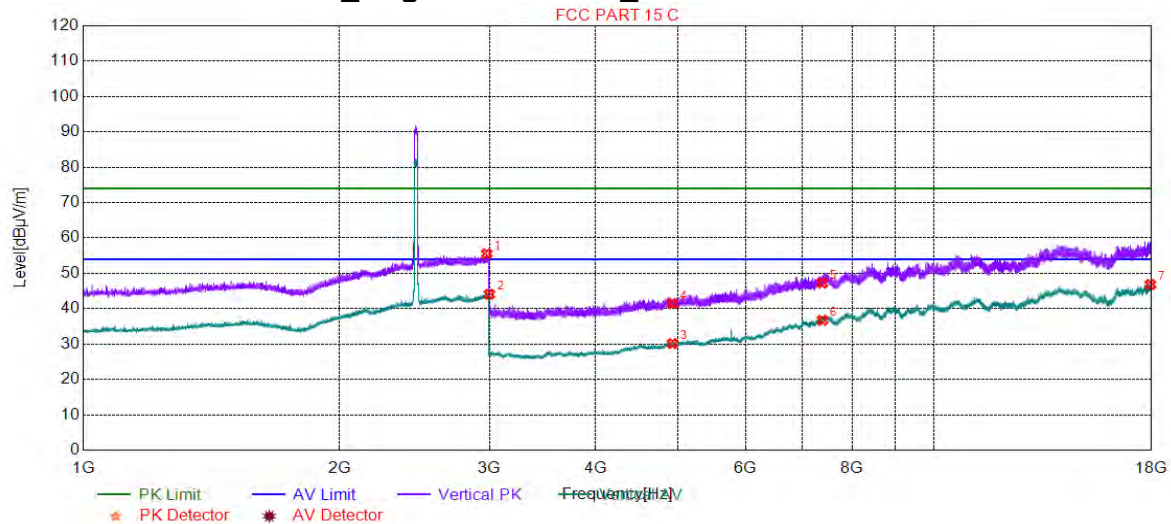
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4.9.2.1.15 802.11N20_ Highest Channel_ Vertical

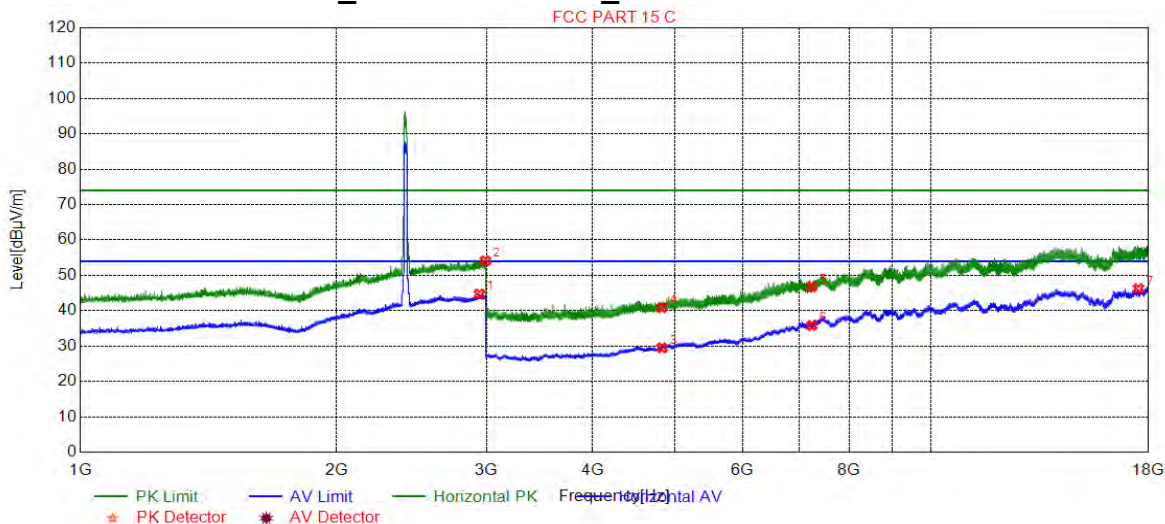


Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2979.4949	55.58	9.54	74.00	18.42	268	197	Vertical
2	2998.9998	44.11	9.45	54.00	9.89	158	127	Vertical
3	4924.0000	30.15	-17.72	54.00	23.85	287	18	Vertical
4	4924.0000	41.45	-17.72	74.00	32.55	272	156	Vertical
5	7386.0000	47.26	-9.55	74.00	26.74	289	0	Vertical
6	7386.0000	36.72	-9.55	54.00	17.28	254	342	Vertical
7	17944.447	46.84	0.70	54.00	7.16	266	0	Vertical



4.9.2.1.16 802.11N20_Lowest Channel_ Horizontal

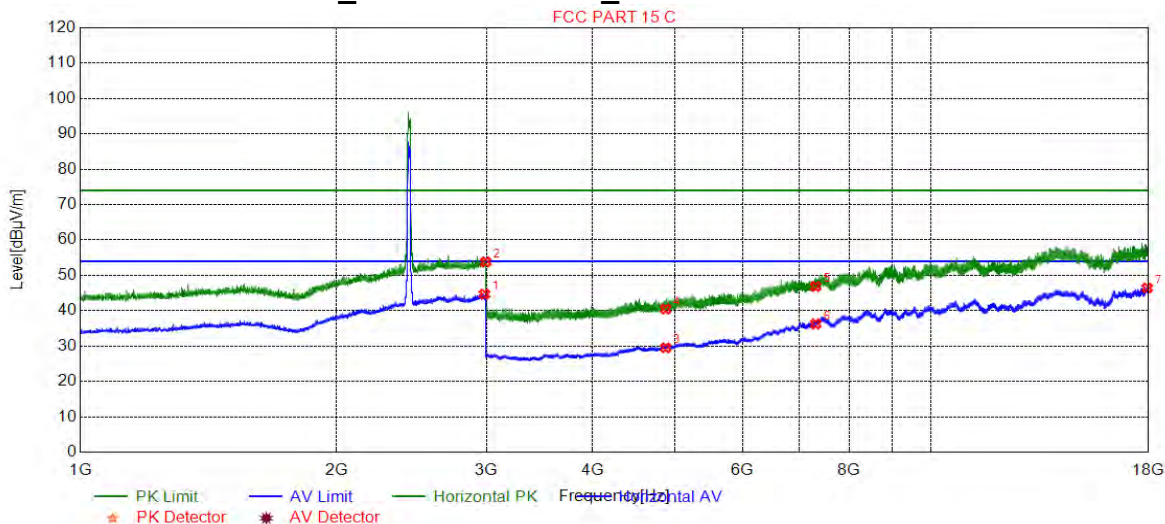


Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2943.9860	44.73	9.62	54.00	9.27	168	334	Horizontal
2	2991.9980	54.12	9.49	74.00	19.88	220	266	Horizontal
3	4824.0000	29.51	-18.21	54.00	24.49	128	319	Horizontal
4	4824.0000	40.87	-18.21	74.00	33.13	171	18	Horizontal
5	7236.0000	46.80	-9.99	74.00	27.20	158	0	Horizontal
6	7236.0000	35.84	-9.99	54.00	18.16	216	40	Horizontal
7	17514.325	46.23	0.98	54.00	7.77	117	191	Horizontal



4.9.2.1.17 802.11N20_Middle Channel_Horizontal



Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2984.9962	44.68	9.52	54.00	9.32	176	129	Horizontal
2	2994.4986	53.78	9.48	74.00	20.22	142	115	Horizontal
3	4874.0000	29.52	-17.99	54.00	24.48	215	327	Horizontal
4	4874.0000	40.47	-17.99	74.00	33.53	173	272	Horizontal
5	7311.0000	46.86	-9.74	74.00	27.14	159	291	Horizontal
6	7311.0000	36.27	-9.74	54.00	17.73	138	241	Horizontal
7	17929.046	46.43	0.70	54.00	7.57	130	342	Horizontal



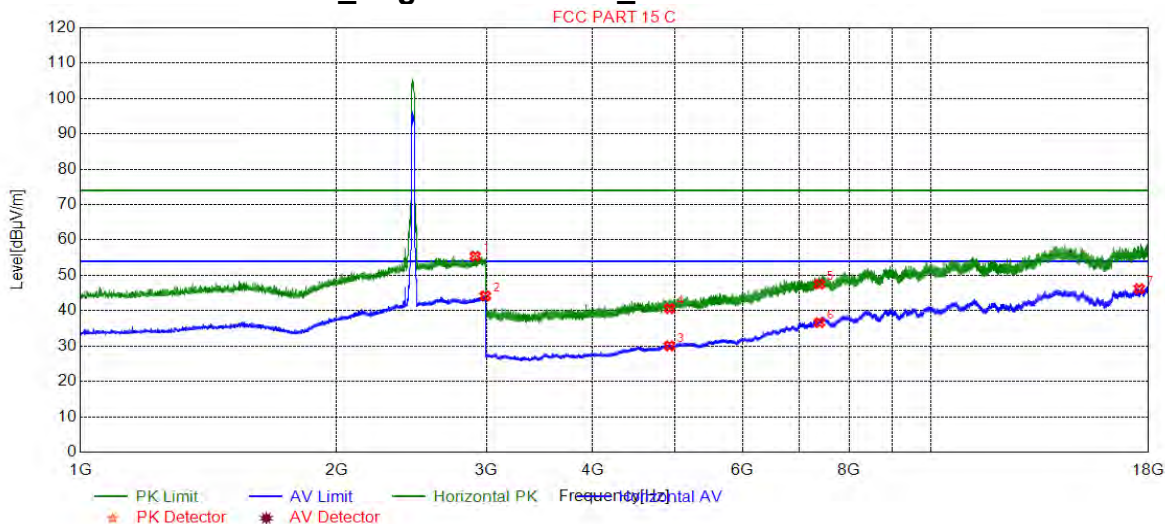
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4.9.2.1.18 802.11N20_ Highest Channel_ Horizontal



Suspected List

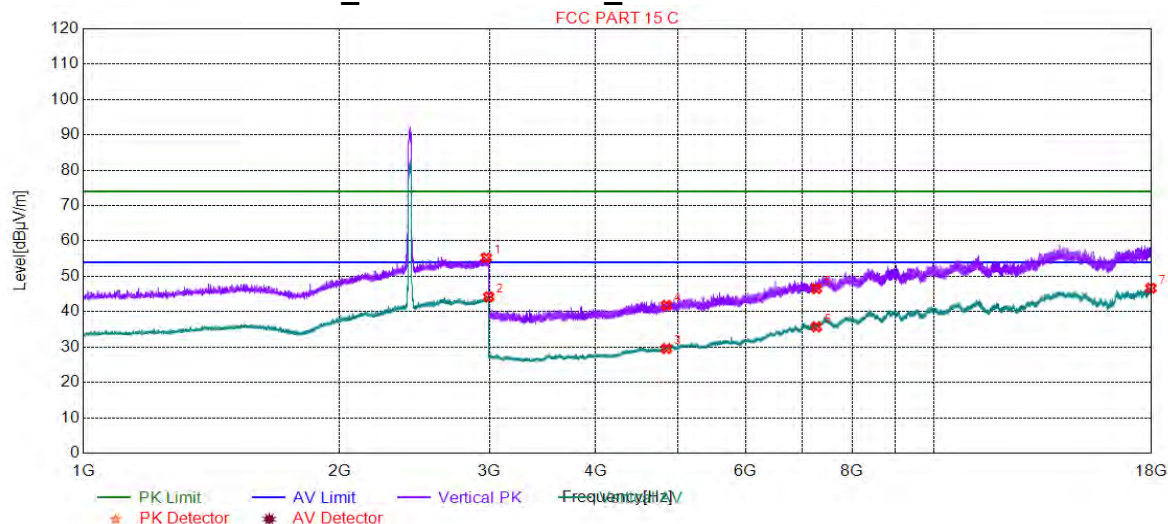
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2910.9777	55.42	9.26	74.00	18.58	239	26	Horizontal
2	2991.4979	44.17	9.49	54.00	9.83	242	164	Horizontal
3	4924.0000	30.06	-17.72	54.00	23.94	156	18	Horizontal
4	4924.0000	40.62	-17.72	74.00	33.38	208	187	Horizontal
5	7386.0000	47.51	-9.55	74.00	26.49	126	140	Horizontal
6	7386.0000	36.64	-9.55	54.00	17.36	208	140	Horizontal
7	17549.527	46.21	1.11	54.00	7.79	127	0	Horizontal



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4.9.2.1.19 802.11N40_Lowest Channel_Vertical



Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2974.4936	55.29	9.57	74.00	18.71	273	215	Vertical
2	2994.9988	44.19	9.47	54.00	9.81	247	131	Vertical
3	4844.0000	29.57	-18.13	54.00	24.43	155	320	Vertical
4	4844.0000	41.82	-18.13	74.00	32.18	256	155	Vertical
5	7266.0000	46.52	-9.88	74.00	27.48	165	39	Vertical
6	7266.0000	35.72	-9.88	54.00	18.28	274	140	Vertical
7	17962.048	46.66	0.71	54.00	7.34	230	90	Vertical



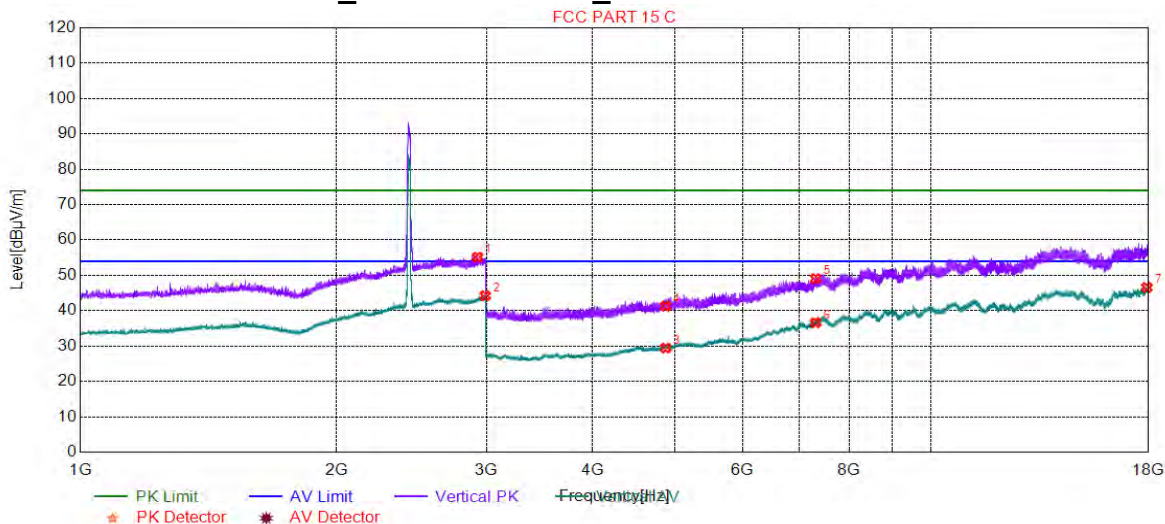
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4.9.2.1.20 802.11N40_Middle Channel_Vertical

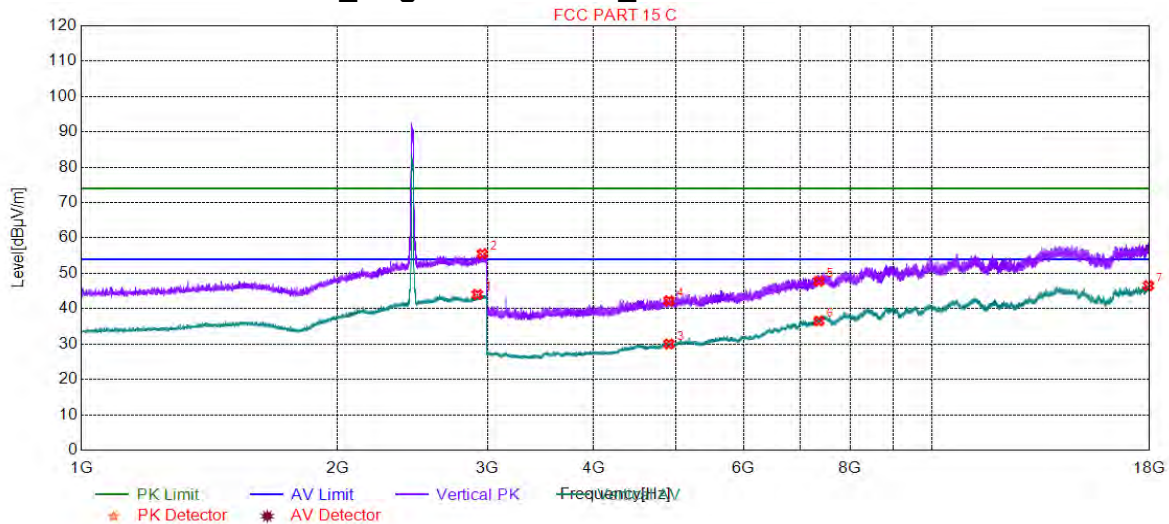


Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2928.9822	55.17	9.45	74.00	18.83	270	156	Vertical
2	2989.9975	44.24	9.50	54.00	9.76	225	156	Vertical
3	4874.0000	29.45	-17.99	54.00	24.55	275	291	Vertical
4	4874.0000	41.29	-17.99	74.00	32.71	278	318	Vertical
5	7311.0000	49.10	-9.74	74.00	24.90	203	342	Vertical
6	7311.0000	36.64	-9.74	54.00	17.36	226	342	Vertical
7	17913.095	46.58	0.69	54.00	7.42	240	0	Vertical

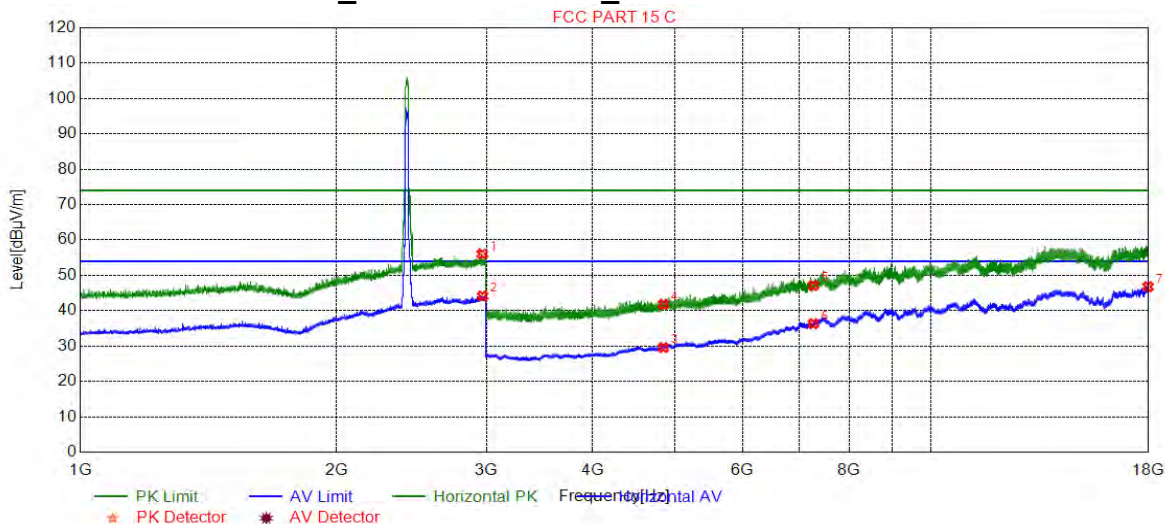


4.9.2.1.21 802.11N40_ Highest Channel_ Vertical



Suspected List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2919.4799	44.02	9.35	54.00	9.98	236	319	Vertical
2	2958.9897	55.53	9.64	74.00	18.47	292	87	Vertical
3	4904.0000	30.02	-17.85	54.00	23.98	181	209	Vertical
4	4904.0000	42.24	-17.85	74.00	31.76	158	360	Vertical
5	7356.0000	47.80	-9.62	74.00	26.20	232	192	Vertical
6	7356.0000	36.51	-9.62	54.00	17.49	172	142	Vertical
7	17937.8469	46.51	0.70	54.00	7.49	199	142	Vertical

4.9.2.1.22 802.11N40_Lowest Channel_Horizontal



Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2966.4916	56.07	9.60	74.00	17.93	247	201	Horizontal
2	2968.9922	44.16	9.59	54.00	9.84	149	73	Horizontal
3	4844.0000	29.60	-18.13	54.00	24.40	208	218	Horizontal
4	4844.0000	41.81	-18.13	74.00	32.19	161	354	Horizontal
5	7266.0000	47.13	-9.88	74.00	26.87	109	192	Horizontal
6	7266.0000	36.34	-9.88	54.00	17.66	172	342	Horizontal
7	17969.198	46.78	0.71	54.00	7.22	182	241	Horizontal



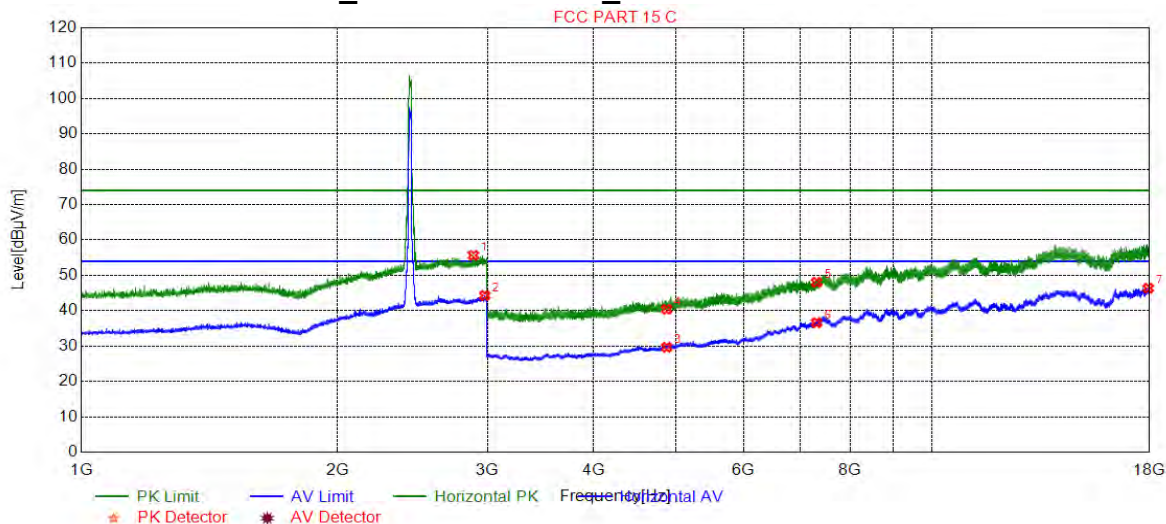
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4.9.2.1.23 802.11N40_Middle Channel_Horizontal



Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2888.4721	55.68	9.16	74.00	18.32	168	260	Horizontal
2	2978.9947	44.32	9.55	54.00	9.68	202	109	Horizontal
3	4874.0000	29.67	-17.99	54.00	24.33	112	278	Horizontal
4	4874.0000	40.39	-17.99	74.00	33.61	136	167	Horizontal
5	7311.0000	48.05	-9.74	74.00	25.95	112	91	Horizontal
6	7311.0000	36.62	-9.74	54.00	17.38	245	292	Horizontal
7	17932.896	46.36	0.70	54.00	7.64	132	241	Horizontal



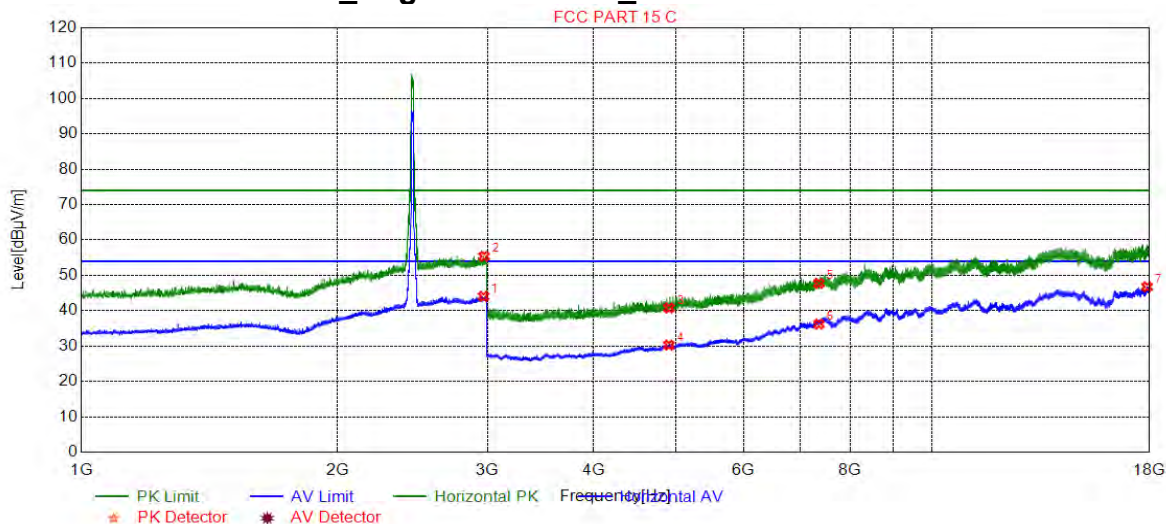
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4.9.2.1.24 802.11N40_ Highest Channel_ Horizontal



Suspected List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2968.4921	44.05	9.59	54.00	9.95	141	177	Horizontal
2	2973.4934	55.38	9.57	74.00	18.62	166	122	Horizontal
3	4904.0000	40.76	-17.85	74.00	33.24	115	294	Horizontal
4	4904.0000	30.27	-17.85	54.00	23.73	134	349	Horizontal
5	7356.0000	47.73	-9.62	74.00	26.27	241	292	Horizontal
6	7356.0000	36.22	-9.62	54.00	17.78	142	141	Horizontal
7	17875.143	46.75	0.36	54.00	7.25	200	141	Horizontal

Remark:

- 1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:
Final Test Level = Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor
- 2) Scan from 9kHz to 25GHz, the disturbance between 9KHz to 30MHz and 18GHz to 25GHz was very low, and the above harmonics were the highest point could be found when testing, The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
- 3) As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. So, only the peak measurements were shown in the report.



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4.10 Restricted bands around fundamental frequency

Test Requirement:	47 CFR Part 15C Section 15.209 and 15.205		
Test Method:	ANSI C63.10: 2013 Section 11.12		
Test Site:	Measurement Distance: 3m or 10m (Semi-Anechoic Chamber)		
Limit:	Frequency	Limit (dBuV/m @3m)	Remark
	30MHz-88MHz	40.0	Quasi-peak Value
	88MHz-216MHz	43.5	Quasi-peak Value
	216MHz-960MHz	46.0	Quasi-peak Value
	960MHz-1GHz	54.0	Quasi-peak Value
	Above 1GHz	54.0	Average Value
		74.0	Peak Value
Test Setup:			

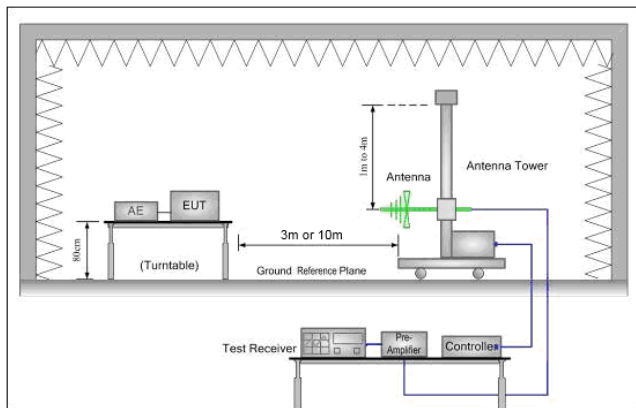


Figure 1. 30MHz to 1GHz

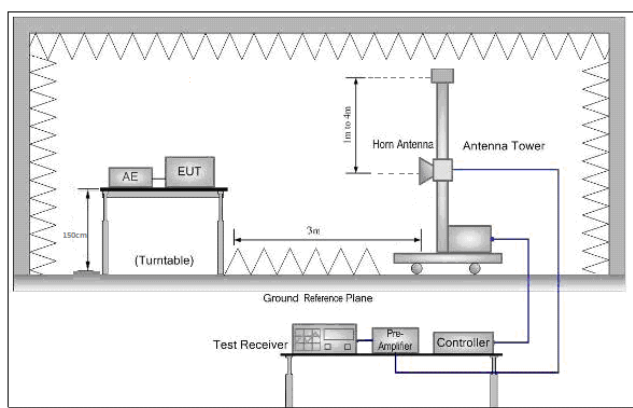


Figure 2. Above 1 GHz



Test Procedure:	a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotating table was turned from 0 degrees to 360 degrees to find the maximum reading. f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. g. Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel h. Test the EUT in the lowest channel, the Highest channel i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, And found the X axis positioning which it is worse case. j. Repeat above procedures until all frequencies measured was complete.
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates. Charge + Transmitting mode.
Final Test Mode:	Pretest the EUT at Charge + Transmitting mode. Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11B; 6Mbps of rate is the worst case of 802.11G ; 6.5Mbps of rate is the worst case of 802.11N(HT20); 13.5Mbps of rate is the worst case of 802.11N(HT40). Only the worst case is recorded in the report.
Instruments Used:	Refer to section 5.10 for details
Test Results:	Pass

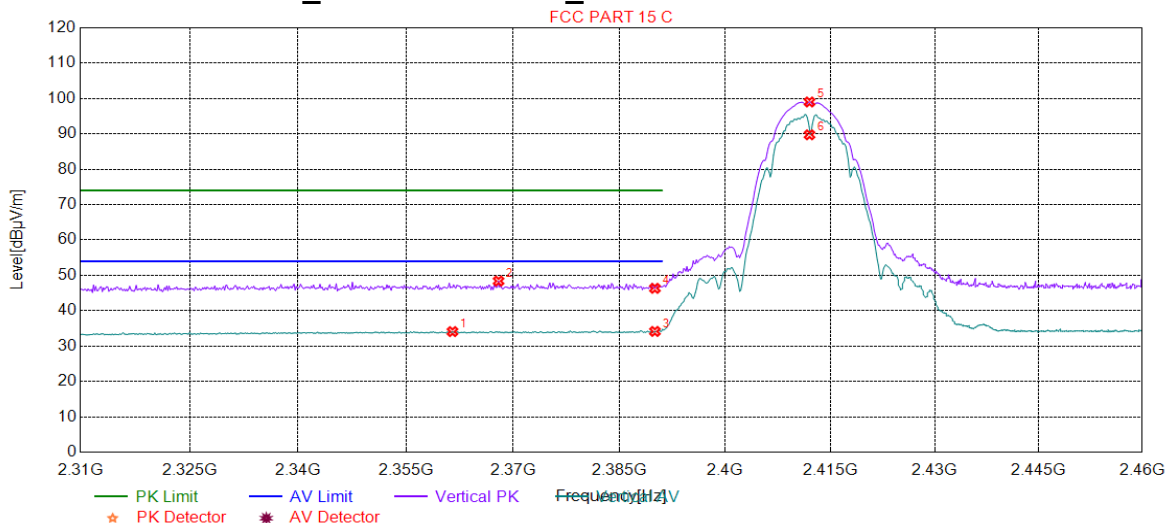




Test plot as follows:

4.10.1 ANT1

4.10.1.1 802.11B_Lowest Channel_ Vertical

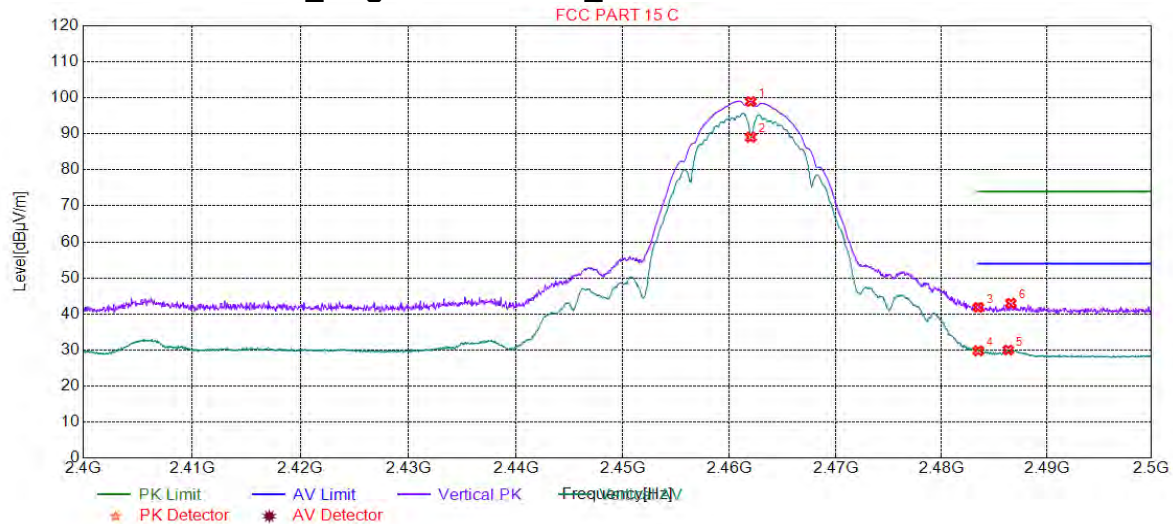


Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2361.5015	34.10	7.80	54.00	19.90	189	192	Vertical
2	2367.9580	48.39	7.79	74.00	25.61	264	92	Vertical
3	2390.0000	34.15	7.77	54.00	19.85	244	38	Vertical
4	2390.0000	46.33	7.77	74.00	27.67	279	237	Vertical
5	2412.0000	99.02	7.81	0.00	-99.02	281	204	Vertical
6	2412.0000	89.74	7.81	0.00	-89.74	249	204	Vertical



4.10.1.2 802.11B_ Highest Channel_ Vertical



Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2462.0000	98.97	7.98	0.00	-98.97	159	207	Vertical
2	2462.0000	89.05	7.98	0.00	-89.05	252	207	Vertical
3	2483.5000	41.84	8.01	74.00	32.16	152	14	Vertical
4	2483.5000	29.78	8.01	54.00	24.22	167	207	Vertical
5	2486.3432	30.00	8.01	54.00	24.00	264	207	Vertical
6	2486.5933	43.00	8.01	74.00	31.00	200	196	Vertical



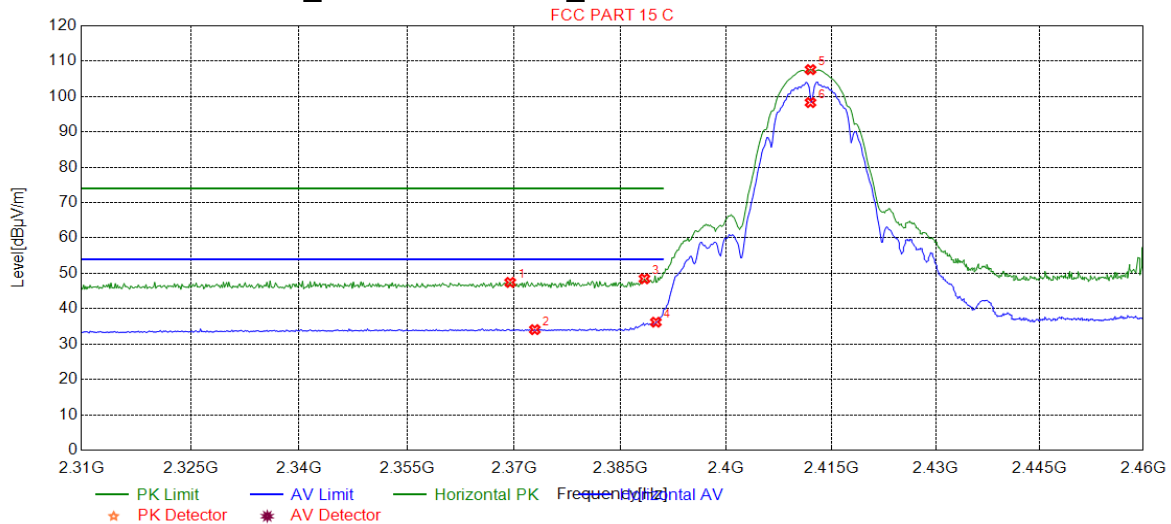
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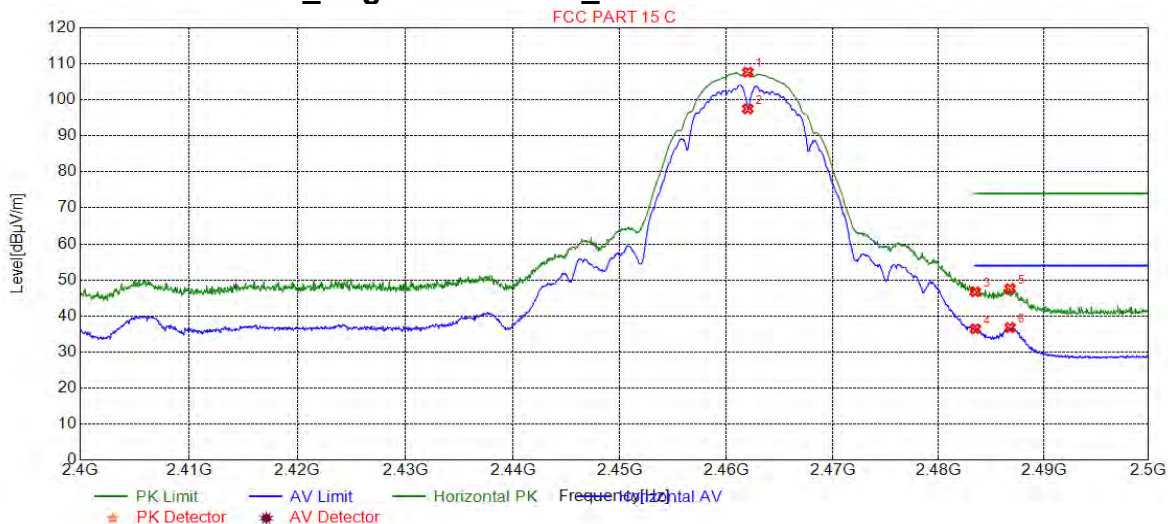
4.10.1.3 802.11B_Lowest Channel_ Horizontal



Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2369.4595	47.44	7.79	74.00	26.56	194	326	Horizontal
2	2372.9129	34.09	7.79	54.00	19.91	125	197	Horizontal
3	2388.3784	48.46	7.77	74.00	25.54	198	322	Horizontal
4	2390.0000	36.19	7.77	54.00	17.81	178	334	Horizontal
5	2412.0000	107.61	7.81	0.00	-107.61	190	334	Horizontal
6	2412.0000	98.28	7.81	0.00	-98.28	229	334	Horizontal

4.10.1.4 802.11B_ Highest Channel_ Horizontal

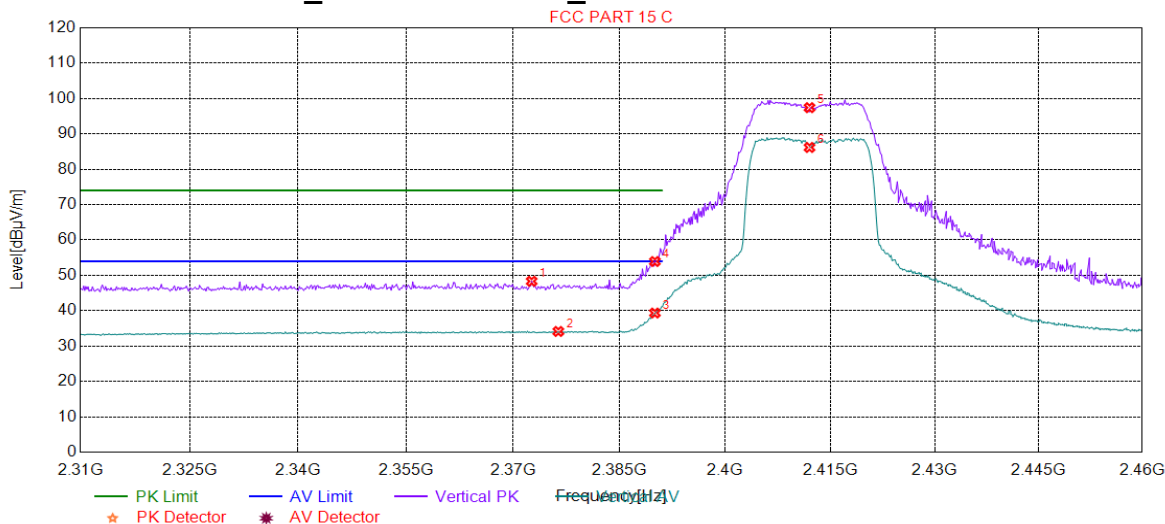


Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2462.0000	107.67	7.98	0.00	-107.67	208	330	Horizontal
2	2462.0000	97.50	7.98	0.00	-97.50	216	330	Horizontal
3	2483.5000	46.73	8.01	74.00	27.27	183	325	Horizontal
4	2483.5000	36.43	8.01	54.00	17.57	234	330	Horizontal
5	2486.7934	47.60	8.01	74.00	26.40	150	325	Horizontal
6	2486.7934	36.78	8.01	54.00	17.22	161	330	Horizontal



4.10.1.5 802.11G_Lowest Channel_ Vertical

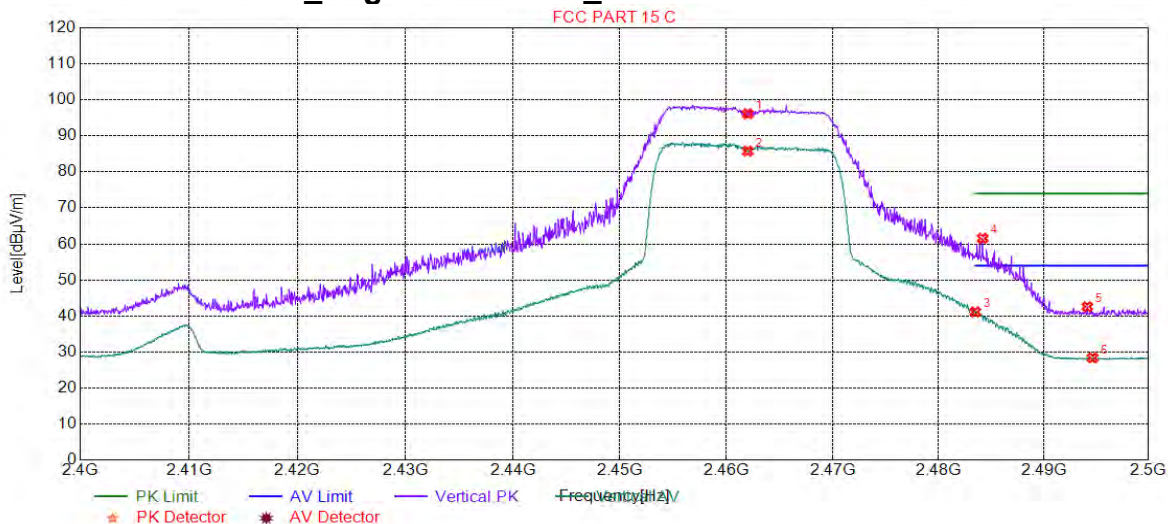


Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2372.6126	48.33	7.79	74.00	25.67	197	324	Vertical
2	2376.3664	34.14	7.78	54.00	19.86	174	357	Vertical
3	2390.0000	39.35	7.77	54.00	14.65	154	232	Vertical
4	2390.0000	53.92	7.77	74.00	20.08	243	228	Vertical
5	2412.0000	97.42	7.81	0.00	-97.42	256	220	Vertical
6	2412.0000	86.16	7.81	0.00	-86.16	265	207	Vertical



4.10.1.6 802.11G_ Highest Channel_ Vertical



Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2462.0000	96.13	7.98	0.00	-96.13	179	206	Vertical
2	2462.0000	85.76	7.98	0.00	-85.76	255	206	Vertical
3	2483.5000	41.13	8.01	54.00	12.87	178	211	Vertical
4	2484.1921	61.57	8.01	74.00	12.43	171	211	Vertical
5	2494.1471	42.57	8.02	74.00	31.43	293	360	Vertical
6	2494.6473	28.36	8.02	54.00	25.64	227	112	Vertical



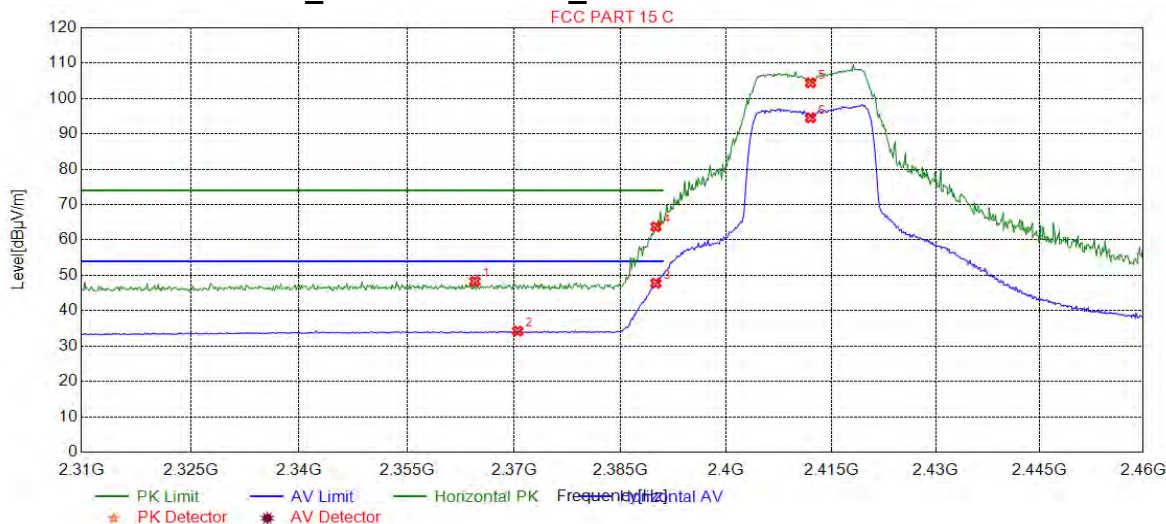
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4.10.1.7 802.11G_Lowest Channel_Horizontal

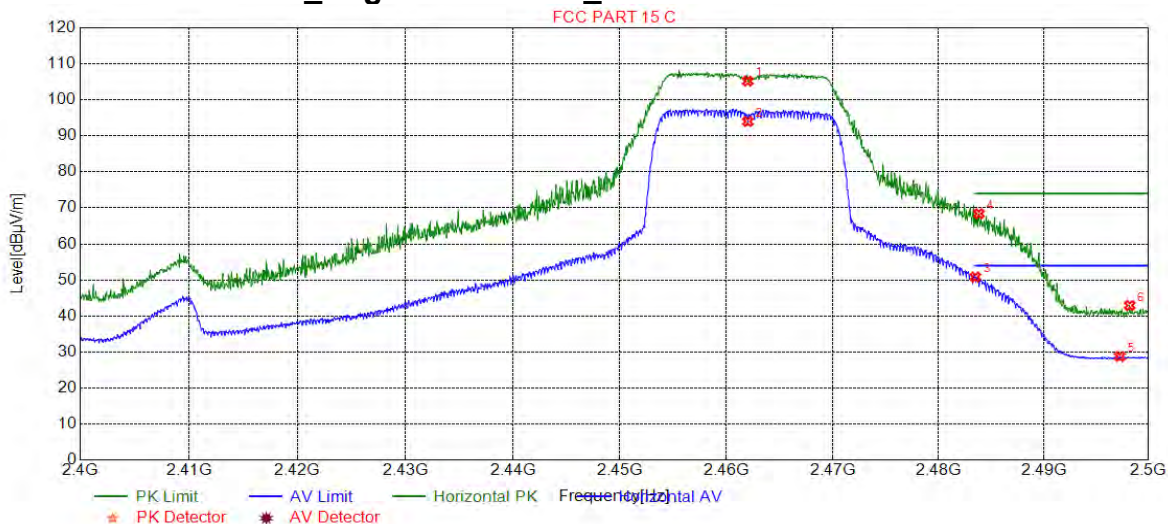


Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2364.5045	48.30	7.80	74.00	25.70	193	152	Horizontal
2	2370.5105	34.23	7.79	54.00	19.77	172	0	Horizontal
3	2390.0000	47.79	7.77	54.00	6.21	172	334	Horizontal
4	2390.0000	63.73	7.77	74.00	10.27	231	334	Horizontal
5	2412.0000	104.45	7.81	0.00	-104.45	200	334	Horizontal
6	2412.0000	94.55	7.81	0.00	-94.55	103	334	Horizontal



4.10.1.8 802.11G_ Highest Channel_ Horizontal

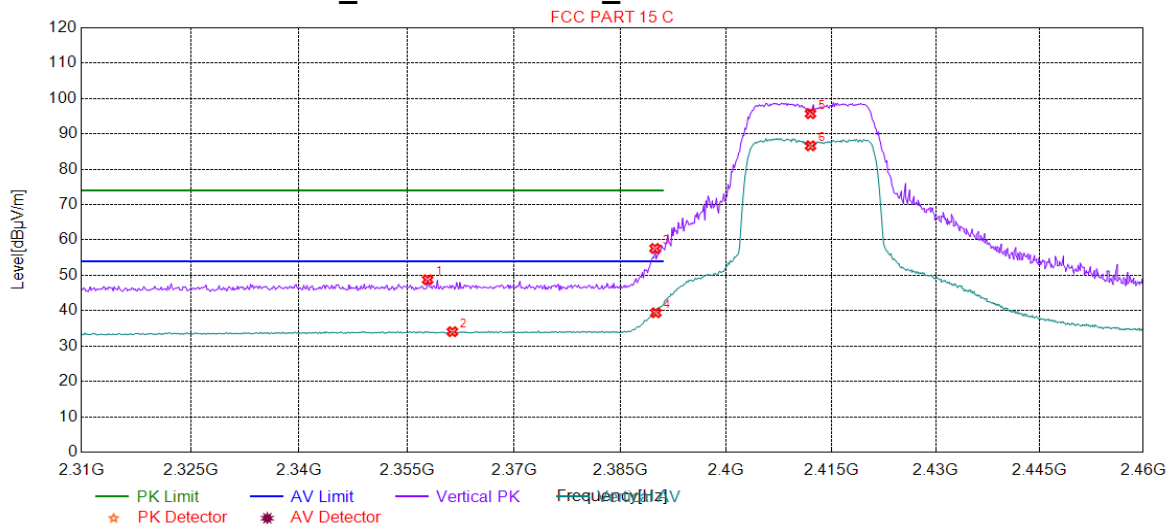


Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2462.0000	105.20	7.98	0.00	-105.20	114	330	Horizontal
2	2462.0000	93.97	7.98	0.00	-93.97	152	335	Horizontal
3	2483.5000	50.81	8.01	54.00	3.19	117	330	Horizontal
4	2483.8419	68.40	8.01	74.00	5.60	119	330	Horizontal
5	2497.2486	28.74	8.03	54.00	25.26	243	330	Horizontal
6	2498.1991	42.93	8.03	74.00	31.07	244	302	Horizontal



4.10.1.9 802.11N20_Lowest Channel_Vertical

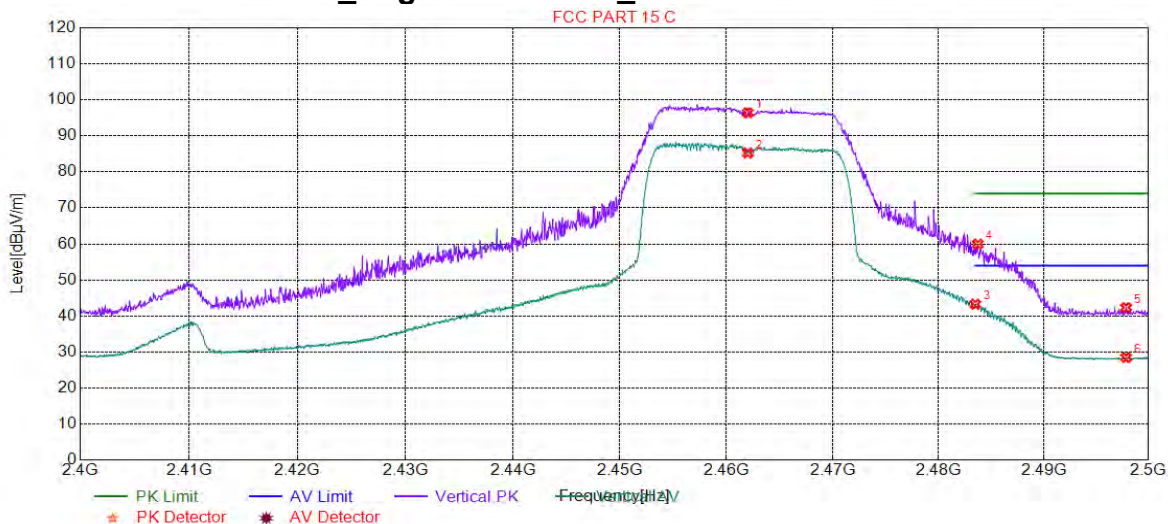


Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2357.8979	48.75	7.80	74.00	25.25	156	187	Vertical
2	2361.3514	34.07	7.80	54.00	19.93	257	275	Vertical
3	2389.8799	57.61	7.77	74.00	16.39	210	229	Vertical
4	2390.0000	39.44	7.77	54.00	14.56	190	229	Vertical
5	2412.0000	95.71	7.81	0.00	-95.71	213	204	Vertical
6	2412.0000	86.63	7.81	0.00	-86.63	209	204	Vertical



4.10.1.10 802.11N20_ Highest Channel_ Vertical



Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2462.0000	96.43	7.98	0.00	-96.43	195	210	Vertical
2	2462.0000	85.24	7.98	0.00	-85.24	181	205	Vertical
3	2483.5000	43.28	8.01	54.00	10.72	252	210	Vertical
4	2483.7419	59.95	8.01	74.00	14.05	155	216	Vertical
5	2497.8489	42.35	8.03	74.00	31.65	291	62	Vertical
6	2497.8489	28.47	8.03	54.00	25.53	236	14	Vertical



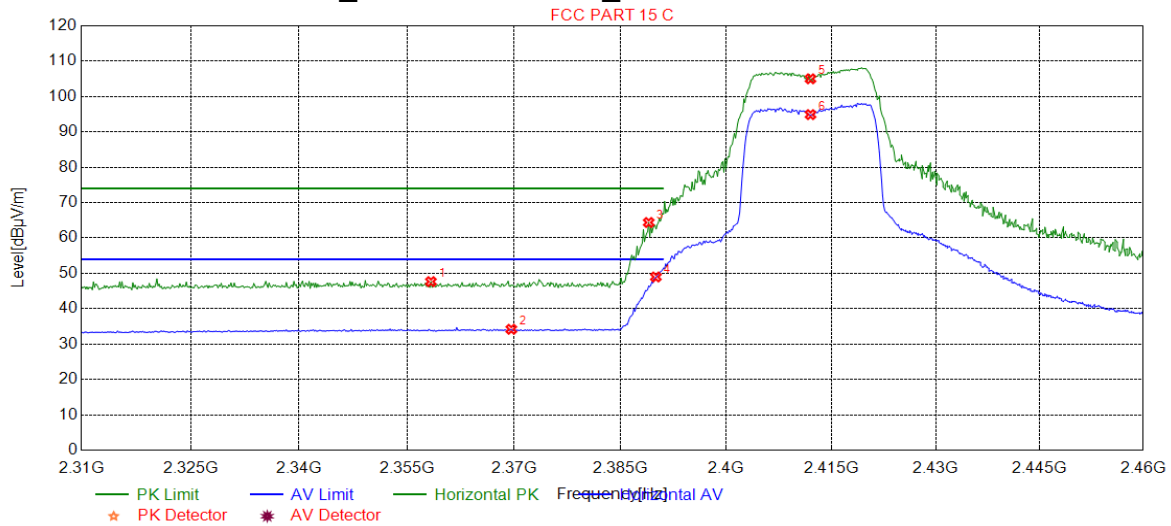
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4.10.1.11 802.11N20_Lowest Channel_Horizontal

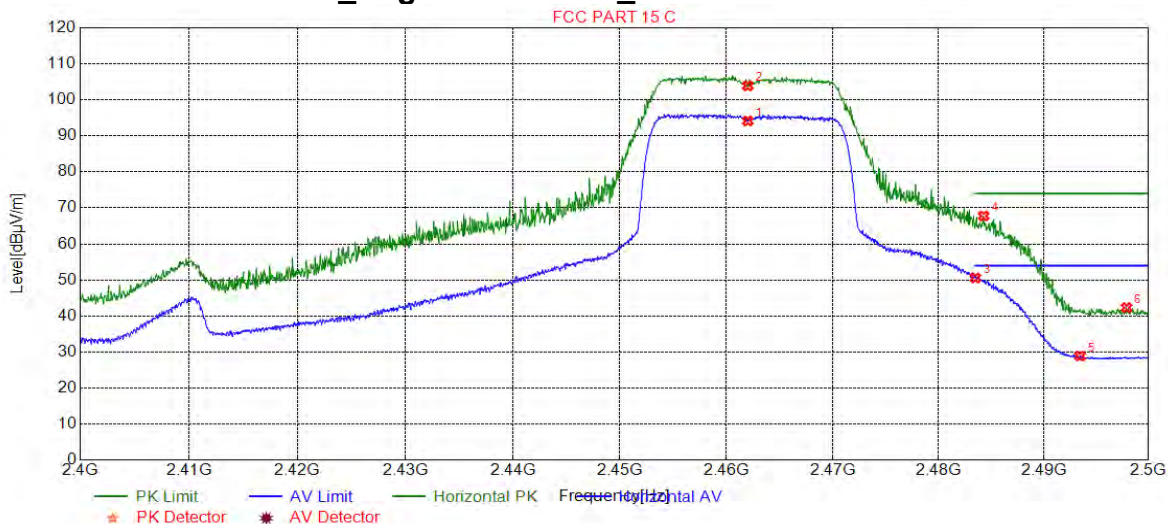


Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2358.3483	47.66	7.80	74.00	26.34	238	27	Horizontal
2	2369.6096	34.19	7.79	54.00	19.81	217	139	Horizontal
3	2388.9790	64.38	7.77	74.00	9.62	150	332	Horizontal
4	2390.0000	48.98	7.77	54.00	5.02	157	335	Horizontal
5	2412.0000	105.01	7.81	0.00	-105.01	190	335	Horizontal
6	2412.0000	94.89	7.81	0.00	-94.89	212	335	Horizontal



4.10.1.12 802.11N20_ Highest Channel_ Horizontal

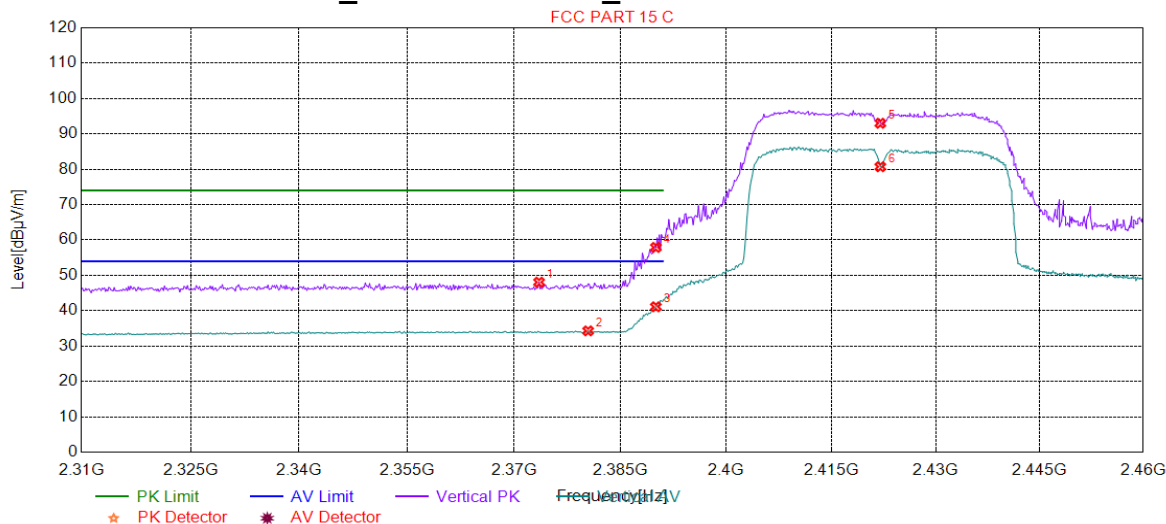


Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2462.0000	94.13	7.98	0.00	-94.13	236	331	Horizontal
2	2462.0000	103.88	7.98	0.00	-103.88	214	173	Horizontal
3	2483.5000	50.58	8.01	54.00	3.42	158	331	Horizontal
4	2484.2921	67.77	8.01	74.00	6.23	125	331	Horizontal
5	2493.4467	28.88	8.02	54.00	25.12	165	331	Horizontal
6	2497.8989	42.30	8.03	74.00	31.70	121	24	Horizontal



4.10.1.13 802.11N40_Lowest Channel_Vertical

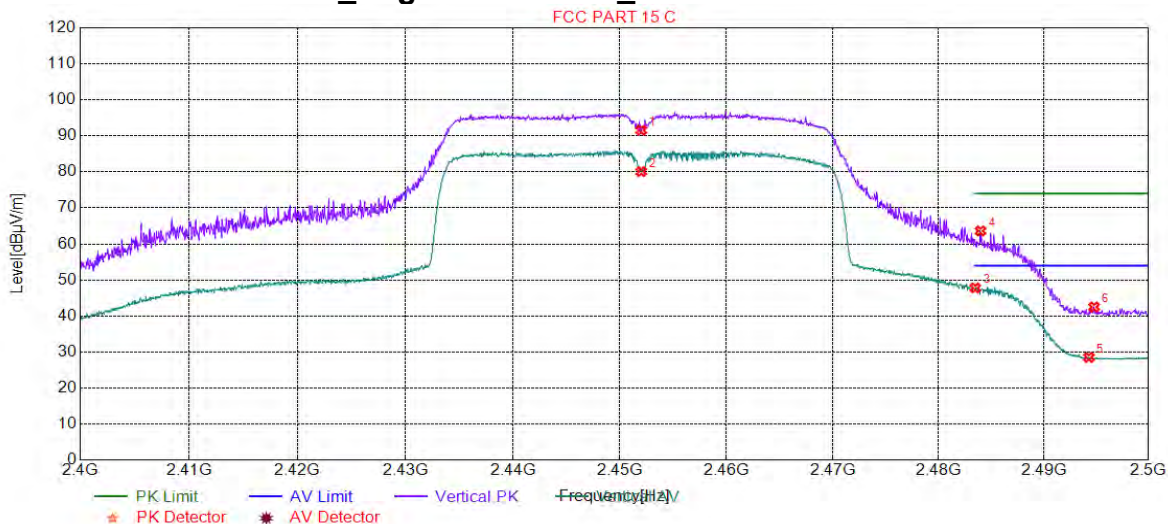


Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2373.5135	48.07	7.79	74.00	25.93	185	263	Vertical
2	2380.4204	34.30	7.78	54.00	19.70	188	129	Vertical
3	2390.0000	41.11	7.77	54.00	12.89	234	230	Vertical
4	2390.0000	57.90	7.77	74.00	16.10	253	50	Vertical
5	2422.0000	93.01	7.85	0.00	-93.01	261	218	Vertical
6	2422.0000	80.71	7.85	0.00	-80.71	272	218	Vertical



4.10.1.14 802.11N40_ Highest Channel_ Vertical

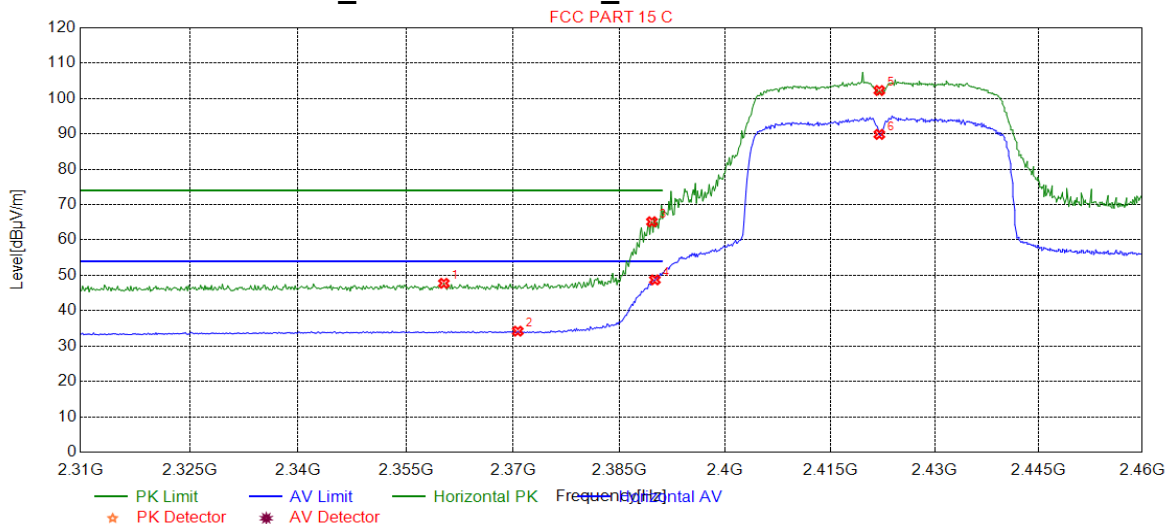


Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2452.0000	91.59	7.97	0.00	-91.59	211	207	Vertical
2	2452.0000	80.09	7.97	0.00	-80.09	157	201	Vertical
3	2483.5000	47.80	8.01	54.00	6.20	253	207	Vertical
4	2483.9920	63.62	8.01	74.00	10.38	231	212	Vertical
5	2494.2971	28.51	8.02	54.00	25.49	281	212	Vertical
6	2494.7974	42.51	8.02	74.00	31.49	241	212	Vertical



4.10.1.15 802.11N40_Lowest Channel_ Horizontal



Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2360.3003	47.75	7.80	74.00	26.25	179	307	Horizontal
2	2370.6607	34.22	7.79	54.00	19.78	221	262	Horizontal
3	2389.5796	65.16	7.77	74.00	8.84	241	336	Horizontal
4	2390.0000	48.73	7.77	54.00	5.27	141	336	Horizontal
5	2422.0000	102.27	7.85	0.00	-102.27	207	336	Horizontal
6	2422.0000	89.85	7.85	0.00	-89.85	169	336	Horizontal



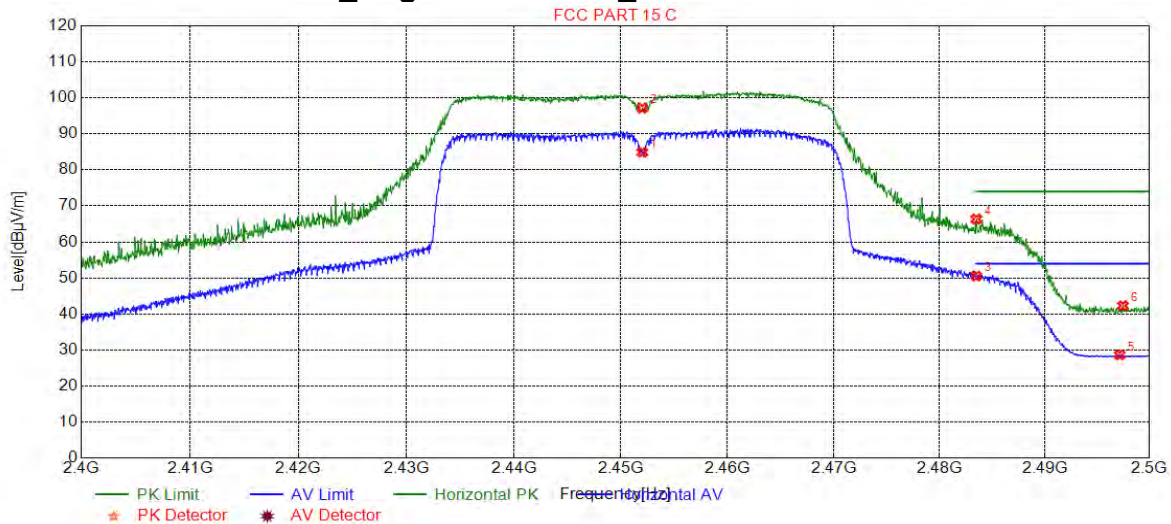
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4.10.1.16 802.11N40_ Highest Channel_ Horizontal



Suspected List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2452.0000	84.89	7.97	0.00	-84.89	221	336	Horizontal
2	2452.0000	97.15	7.97	0.00	-97.15	248	330	Horizontal
3	2483.5000	50.53	8.01	54.00	3.47	221	330	Horizontal
4	2483.5000	66.35	8.01	74.00	7.65	218	330	Horizontal
5	2497.1486	28.64	8.03	54.00	25.36	151	330	Horizontal
6	2497.4487	42.27	8.03	74.00	31.73	154	180	Horizontal

Remark:

The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level = Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor

All Modes have been tested, but only the worst case data displayed in this report.



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5 Measurement Uncertainty (95% confidence levels, k=2)

Lab A:

No.	Item	Measurement Uncertainty
1	Total RF power, conducted	$\pm 0.75\text{dB}$
2	RF power density, conducted	$\pm 2.84\text{dB}$
3	Spurious emissions, conducted	$\pm 0.75\text{dB}$
4	Temperature test	$\pm 1^{\circ}\text{C}$
5	Humidity test	$\pm 3\%$
6	DC and low frequency voltages	$\pm 0.5\%$

Lab B:

No.	Item	Measurement Uncertainty
1	Conduction Emission	$\pm 3.0\text{dB}$ (150kHz to 30MHz)
2	Radiated Emission	$\pm 4.8\text{dB}$ (Below 1GHz)
		$\pm 4.8\text{dB}$ (1GHz to 6GHz)
		$\pm 4.5\text{dB}$ (6GHz to 18GHz)
		$\pm 5.02\text{dB}$ (Above 18GHz)



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6 Equipment List

RF conducted test					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date	Cal.Duedate
				(yyyy-mm-dd)	(yyyy-mm-dd)
DC Power Supply	Agilent Technologies Inc	66311B	W009-09	2019/7/15	2020/7/15
Signal Analyzer	Rohde & Schwarz	FSV	W025-05	2020/1/3	2021/1/2
Coaxial Cable	SGS	N/A	SEM031-01	2019/6/12	2020/6/11
Attenuator	Weinschel Associates	WA41	SEM021-09	N/A	N/A
Signal Generator	KEYSIGHT	N5173B	SEM006-05	2019/7/14	2020/7/14
Temperature Chamber	GIANT FORCE	ICT-150-40-CP-AR	W027-03	2019/10/27	2020/10/27
Power Meter	Rohde & Schwarz	NRVS	SEM014-02	2019/7/14	2020/7/14

CE Test System					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Shielding Room	Brilliant-emc	N/A	XAW03-35-01	2019-09-11	2022-09-10
Test receiver	ROHDE&SCHWARZ	ESR	XAW01-08-01	2019-09-07	2020-09-06
Artificial network	ROHDE&SCHWARZ	ENV216	XAW01-04-01	2019-07-16	2020-07-15
Temperature and humidity meter	MingGao	TH101B	XAW01-01-01	2019-12-06	2020-12-05
Measurement Software	Tonscend	TS+ CE V2.5	XAW02-05-02	NCR	NCR



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RSE Test System					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Semi-Anechoic Chamber	Brilliant-emc	N/A	XAW03-35-01	2019-09-11	2022-09-10
MXA signal analyzer	Keysight	N9020A	XAW01-06-01	2019-06-27	2020-06-26
Test receiver	ROHDE&SCHWARZ	ESR	XAW01-08-01	2019-09-07	2020-09-06
Receiving antenna (30MHz~3GHz)	Schwarzbeck	VULB 9163	XAW01-09-01	2019-10-13	2021-10-12
Receiving antenna (1GHz~18GHz)	Schwarzbeck	BBHA 9120D	XAW01-09-02	2019-10-13	2021-10-12
Receiving antenna (15GHz~40GHz)	Schwarzbeck	BBHA 9170	XAW01-09-03	2019-10-13	2021-10-12
Directional antenna rack controller	Max-Full	MF-7802BS	XAW03-03-01	NCR	NCR
High-speed antenna rack controller	Max-Full	MF-7802	XAW03-04-01	NCR	NCR
Filter bank	Tonscend	JS0806-F	XAW03-05-01	NCR	NCR
Filter bank	Tonscend	JS0806s	XAW03-05-02	NCR	NCR
Amplifier	Tonscend	TAP00903040	XAW01-41-01	2019-11-18	2020-11-17
Amplifier	Tonscend	TAP01018048	XAW01-41-02	2019-11-18	2020-11-17
Amplifier	Tonscend	TAP18040048	XAW01-41-03	2019-12-03	2020-12-02
Amplifier	Shanghai Steed	YX28980930	XAW01-41-06	2019-11-18	2020-11-17
Temperature and humidity meter	MingGao	TH101B	XAW01-01-01	2019-12-06	2020-12-05
Measurement Software	Tonscend	TS+ RSE V3.0.0.2	XAW02-05-01	NCR	NCR



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7 Photographs - EUT Constructional Details

Refer to Appendix A - Photographs of Set-Up for ZR/2020/20031.

The End



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